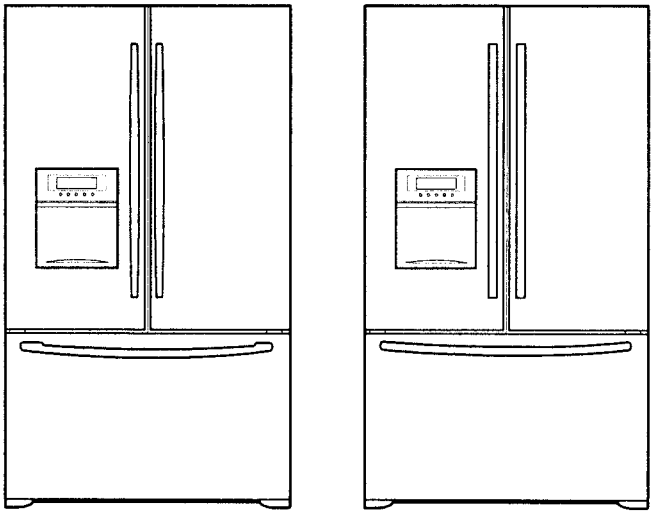
LG

REFRIGERATOR

SERVICE MANUAL

CAUTION
BEFORE SERVICING THE UNIT,
READ THE SAFETY PRECAUTIONS IN THIS MANUAL.



MODELS: GR-B218W

COLOR: LUXURY SILVER

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SAFETY PRECAUTIONS

Please read the following instructions before servicing your refrigerator.

1. Check the refrigerator for current leakage.
2. To prevent electric shock, unplug before servicing.
3. Always check line voltage and amperage.
4. Use standard electrical components.
5. Don't touch metal products in the freezer with wet hands. This may cause frostbite.
6. Prevent water from spiling onto electric elements or the machine parts.
7. Before tilting the refrigerator, remove all materials from on or in the refrigerator.
8. When servicing the evaporator, wear gloves to prevent injuries from the sharp evaporator fins.
9. Service on the refrigerator should be performed by a qualified technician. Sealed system repair must be performed by a CFC certified technician.

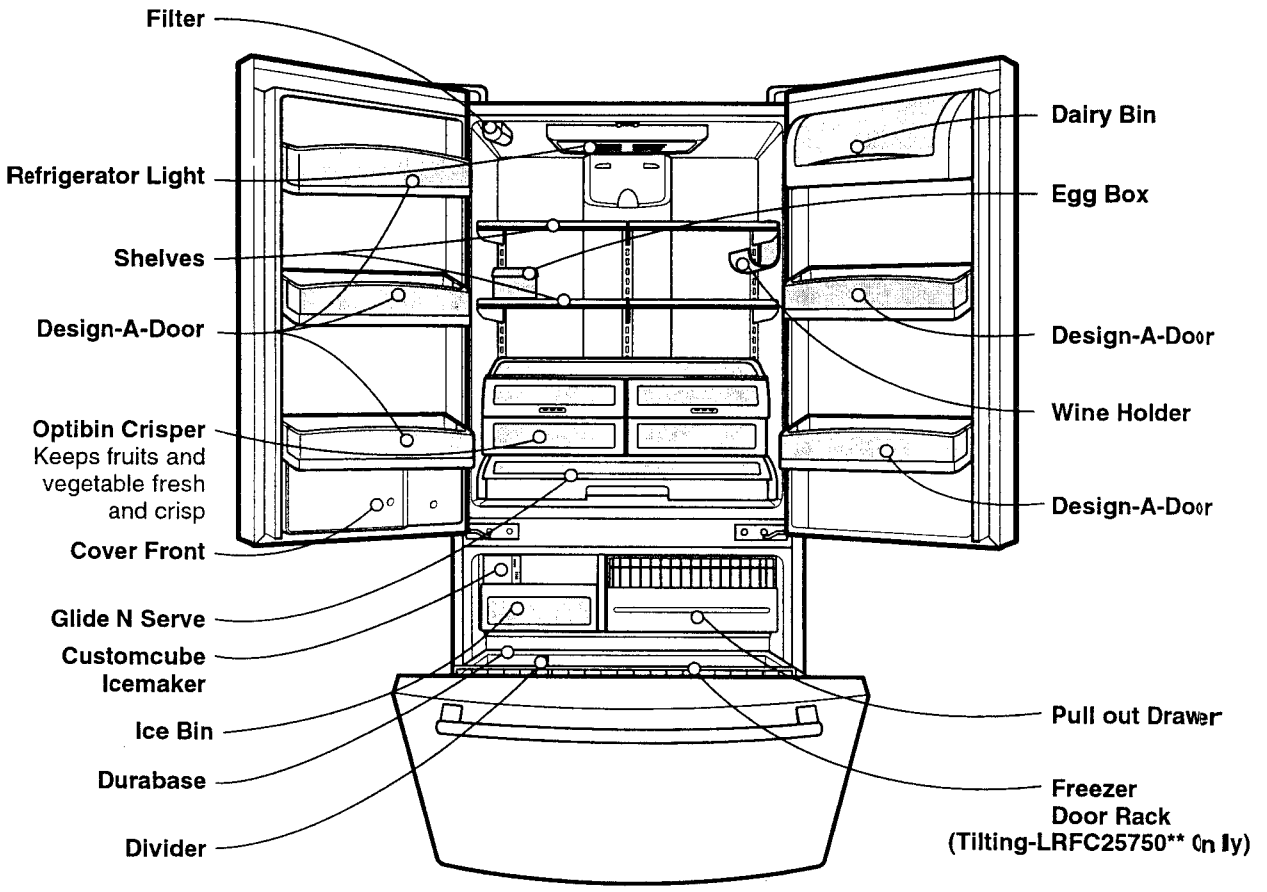
1. SPECIFICATIONS

21 cu. ft. / 25 cu. ft.

ITEMS	SPECIFICATIONS
DOOR DESIGN	Side Rounded
DIMENSIONS (inches)	35 3/4 x 30 x 69 3/4 (WxDxH) 21cu.ft
	35 3/4 x 34 1/4 x 69 3/4 (WxDxH) 25cu.ft
NET WEIGHT (pounds)	298 (21cu.ft)
	320 (25cu.ft)
COOLING SYSTEM	Fan Cooling
TEMPERATURE CONTROL	Micom Control
DEFROSTING SYSTEM	Full Automatic Heater Defrost
DOOR FINISH	Embossed Metal, VCM, Stainless
HANDLE TYPE	Bar
INNER CASE	ABS Resin
INSULATION	Polyurethane Foam

ITEMS		SPECIFICATIONS
VEGETABLE TRAY		Opaque Drawer Type
COMPRESSOR		PTC Starting Type
EVAPORATOR		Fin Tube Type
CONDENSER		Wire Condenser
REFRIGERANT		R-134a (115 g)
LUBRICATING OIL		ISO10 (280 ml)
DEFROSTING DEVICE		SHEATH HEATER
LAMP	REFRIGERATOR	40 W (2EA)
	FREEZER	40 W (1EA)

2. PARTS IDENTIFICATION



3. DISASSEMBLY

3-1 DOOR

● Refrigerator Door

1. Remove the top hinge cover and disconnect the wire harness.
2. Remove the earth screw.
3. Rotate the lever hinge and lift off hinge.
4. Lift off the refrigerator door.
5. Replace in the reverse order.

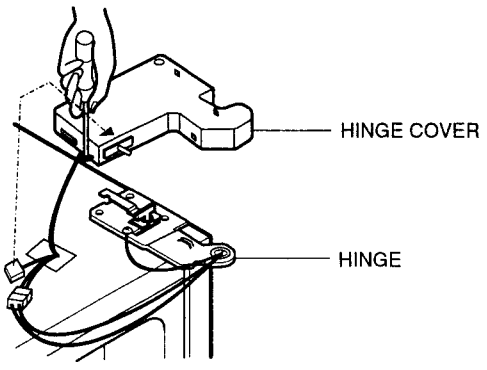


Figure 1

● Door Gasket Removal

1. Remove door frame cover

Starting at top of cover and working down, snap cover out and away from door.

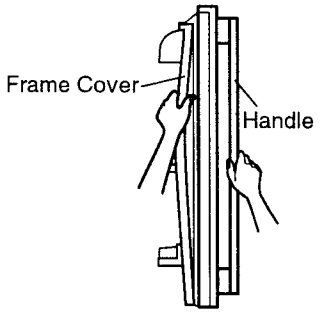


Figure 2

2. Remove gasket bracket clips

There are four clips on each door. Start bracket removal near one of the middle clips.

1) Pull gasket back to expose gasket bracket clip and door frame.
2) Insert a flat tip screwdriver into seam between gasket bracket and door frame and pry back until clips snaps out.
3) Continue prying back along seam until all clips snap out.

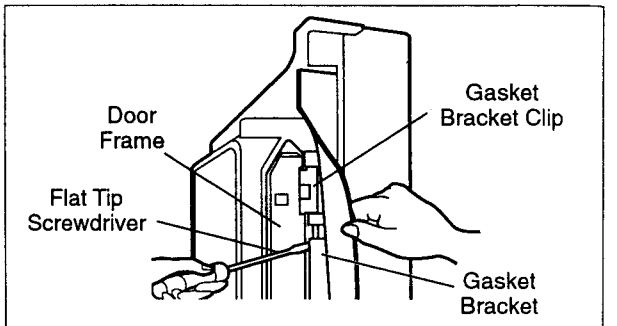


Figure 3

3. Remove gasket

Pull gasket free from gasket channel on the three remaining sides of door.

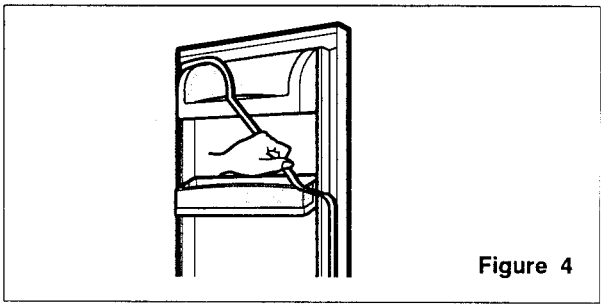


Figure 4

● Door Gasket Replacement

1. Insert gasket bracket clips

1) Insert gasket bracket edge beneath door frame edge.
2) Turn upper gasket bracket spring so that both spring ends are in the door channel.
3) Push in clip until you hear it snap securely into place.

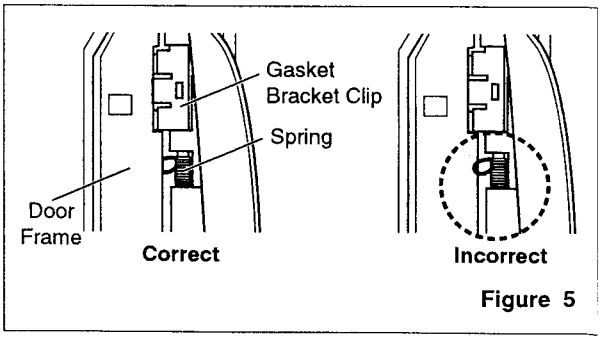


Figure 5

4) Repeat steps 2 and 3 for lower gasket bracket spring.
5) Push in remaining two clips until you hear each snap securely into place.

Note: Make sure that no part of gasket bracket edge protrudes from beneath door frame edge.

2. Insert gasket into channel

1) Snap gasket assembly into the door bracket.

<Inserting the Gasket Assembly into the Bracket Door>

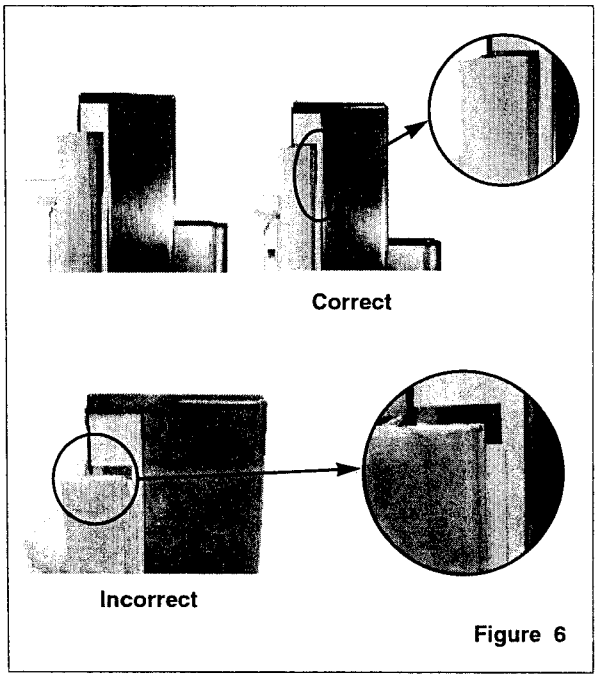


Figure 6

2) Press gasket into channels on the three remaining sides of door.

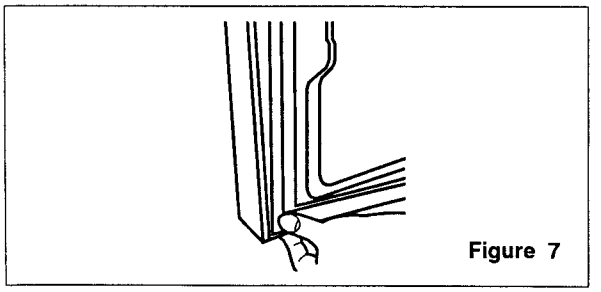


Figure 7

3. Replace door frame cover

Starting at top of cover and working down, snap cover back into door.

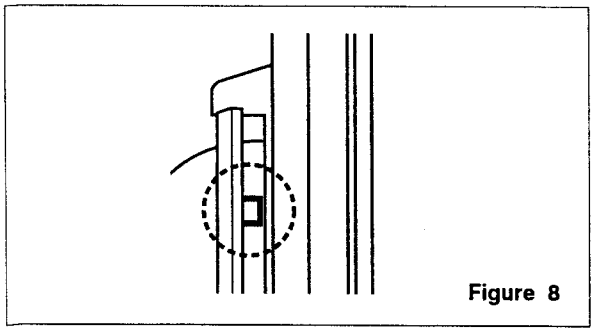


Figure 8

3-2 TO REMOVE THE DISPENSER

1. Use fiat tip screwdriver to pry back hooks on botton underside of cover dispenser.

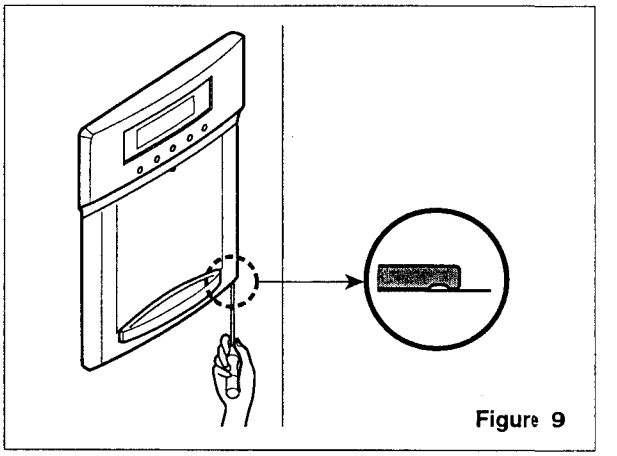


Figure 9

2. Pry off cover dispenser.

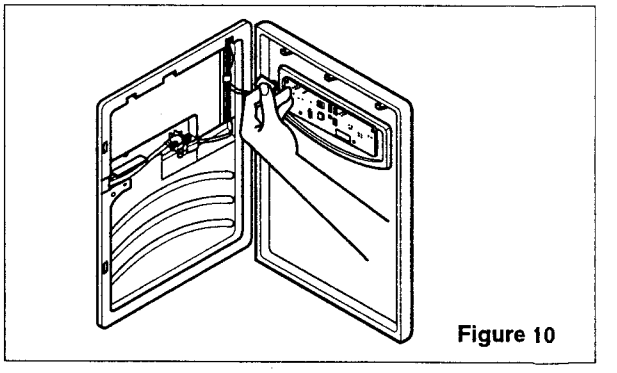


Figure 10

Disconnect wire harness.

3. Replace cover dispenser in opposite manner and order of removal.

3-3 FAN AND FAN MOTOR

1. Remove the freezer shelf. (If your refrigerator has an icemaker, remove the icemaker first)
2. Remove the plastic guide for slides on left side by unscrewing phillips head screws.
3. Remove the grille by removing one screw and pulling the grille forward.
4. Remove the Fan Motor assembly by loosening 2 screws and disassembling the shroud.
5. Pull out the fan and separate the Fan Motor and Bracket.

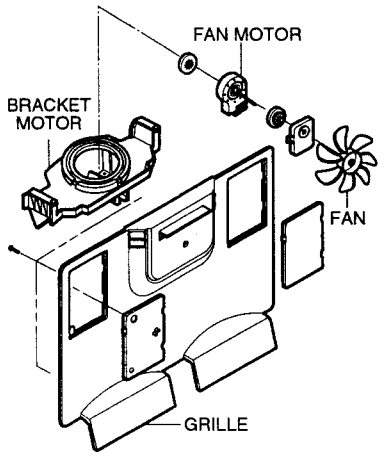


Figure 11

3-4 DEFROST CONTROL ASSEMBLY

Defrost Control assembly consists of Defrost Sensor and FUSE-M.

The Defrost Sensor works to defrost automatically. It is attached to the metal side of the Evaporator and senses its temperature. At 72°C, it turns the Defrost Heater off.

Fuse-M is a safety device for preventing over-heating of the Heater when defrosting.

1. Pull out the grille assembly. (Figure 12)
2. Separate the connector with the Defrost Control assembly and replace the Defrost Control assembly after cutting the Tie Wrap. (Figure 13)

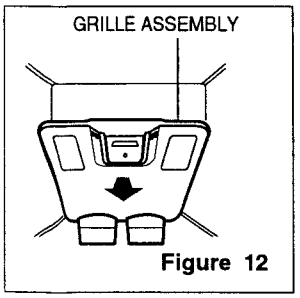


Figure 12

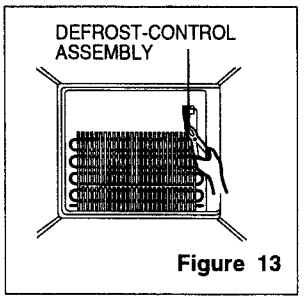


Figure 13

3-5 LAMP

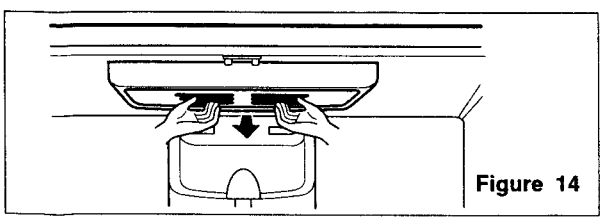


Figure 14

3-5-1 Refrigerator Compartment Lamp

1. Unplug the power cord from the outlet.
2. Remove refrigerator shelves.
3. Release the hooks on both ends of the lamp shield and pull the shield downward to remove it.
4. Turn the lamp counterclockwise.
5. Assembly is the reverse of disassembly. Replacement bulb must be the same specification as the original (Max. 40 W2EA).

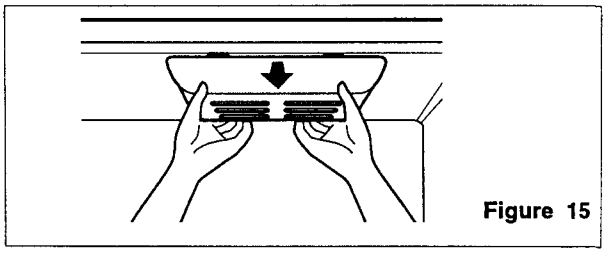


Figure 15

3-5-2 Freezer Compartment Lamp

1. Unplug refrigerator or disconnect power.
2. Reach behind light shield to remove bulb.
3. Replace bulb with a 40-watt appliance bulb.
4. Plug in refrigerator or reconnect power.

3-6 CONTROL BOX-REFRIGERATOR

1. First, remove all shelves in the refrigerator, than remove the Refrigerator control Box by loosening 2 screws.

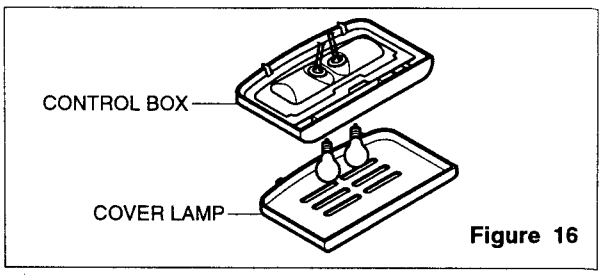


Figure 16

2. Remove the Refrigerator Control Box by pulling it downward.
3. Disconnect the lead wire on the right position and separate the lamp sockets.

3-7 MULTI DUCT

1. Remove the upper and lower Caps by using a flat screwdriver, and remove 2 screws. (Figure 17)
2. Disconnect the lead wire on the bottom position.

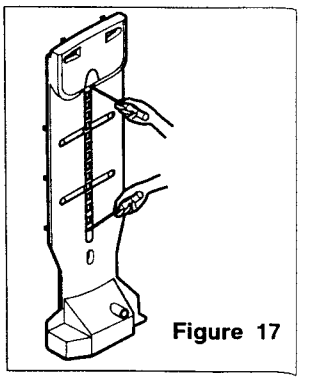


Figure 17

4. ADJUSTMENT

4-1 COMPRESSOR

4-1-1 Role

The compressor intakes low temperature and low pressure gas from the evaporator of the refrigerator and compresses this gas to high-temperature and high-pressure gas. It then delivers the gas to the condenser.

4-1-2 Composition

The compressor includes overload protection. The PTC starter and OLP (overload protector) are attached to the outside of the compressor. Since the compressor is manufactured to tolerances of 1 micron and is hermetically sealed in a dust and moisture-free environment, use extreme caution when repairing it.

4-1-3 Note for Usage

(1) Be careful not to allow over-voltage and over-current.
(2) If compressor is dropped or handled carelessly, poor operation and noise may result.
(3) Use proper electric components appropriate to the Particular Compressor in your product.
(4) Keep Compressor dry.
If the Compressor gets wet (in the rain or a damp environment) and rust forms in the pin of the Hermetic Terminal, poor operation and contact may result.
(5) When replacing the Compressor, be careful that dust, humidity, and soldering flux don't contaminate the inside of the compressor. Contamination in the cylinder may cause noise, improper operation or even cause it to lock up.

4-2 PTC-STARTER

4-2-1 Composition of PTC-Starter

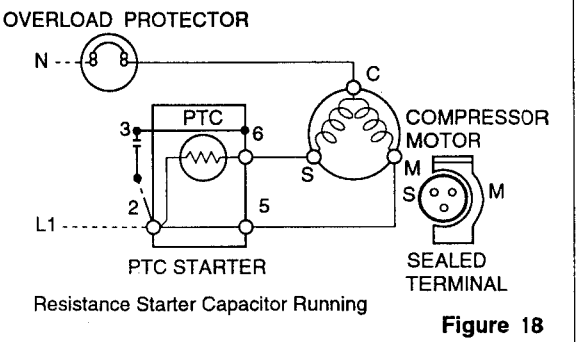
(1) PTC (Positive Temperature Coefficient) is a no-contact semiconductor starting device which uses ceramic material consisting of $BaTiO_3$.
(2) The higher the temperature is, the higher the resistance value. These features are used as a starting device for the Motor.

4-2-2 Role of PTC-Starter

(1) The PTC is attached to the Sealed Compressor and is used for starting the Motor.
(2) The compressor is a single-phase induction motor. Durign the starting operation, the PTC allows current flow to both the start winding and main winding.

4-2-3 PTC-Applied Circuit Diagram

● Starting Method for the Motor



Resistance Starter Capacitor Running

Figure 18

4-2-4 Motor Restarting and PTC Cooling

(1) It requires approximately 5 minutes for the pressure to equalize before the compressor can restart.
(2) The PTC device generates heat during operation. Therefore, it must be allowed to cool before the compressor can restart.

4-2-5 Relation of PTC-Starter and OLP

(1) If the compressor attempts to restart before the PTC device is cooled, the PTC device will allow current to flow only to the main winding.
(2) The OLP will open because of the over current condition. This same process will continue (3 to 5 times) when the compressor attempts to restart until the PTC device has cooled. The correct OLP must be properly attached to prevent damage to the compressor.
Parts may appear physically identical but could have different electrical ratings. Replace parts by part number and model number. Using an incorrect part could result in damage to the product, fire, injury, or possibly death.

4-2-6 Note for Using the PTC-Starter

(1) Be careful not to allow over-voltage and over-current.
(2) Do not drop or handle carelessly.
(3) Keep away from any liquid.
If liquid such as oil or water enters the PTC, PTC materials may fail due to breakdown of their insulating capabilities.
(4) If the exterior of the PTC is damaged, the resistance value may be altered. This can cause damage to the compressor and result in a no-start or hard-to-start condition.
(5) Always use the PTC designed for the compressor and make sure it is properly attached to the compressor. Parts may appear physically identical but could have different electrical ratings. Replace parts by part number and model number. Using an incorrect part could result in damage to the product, fire, injury, or possibly death.

4-3 OLP (OVERLOAD PROTECTOR)

4-3-1 Definition of OLP

(1) OLP (OVERLOAD PROTECTOR) is attached to the Compressor and protects the Motor by opening the circuit to the Motor if the temperature rises and activating the bimetal spring in the OLP.

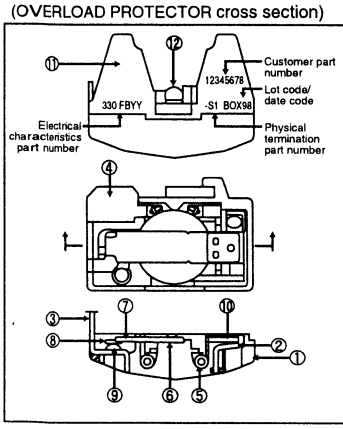
(2) When high current flows to the Compressor motor, the Bimetal works by heating the heater inside the OLP, and the OLP protects the Motor by cutting off the current flowing to the Compressor Motor.

4-3-2 Role of the OLP

(1) The OLP is attached to the Sealed Compressor used for the Refrigerator. It prevents the Motor Coil from being started in the Compressor.

(2) For normal operation of the OLP, do not turn the Adjust Screw of the OLP in any way.

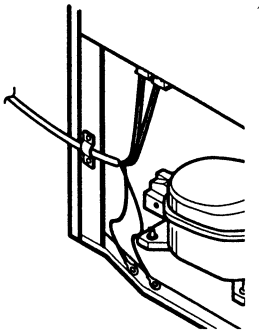
(OVERLOAD PROTECTOR cross section)



Part No.	Name
①	Base, phenolic (UL 94 V-0 rated)
②	Movable arm support, plated steel
③	Stationary contact support, plated steel
④	Heater support, plated steel
⑤	Heater, resistance alloy
⑥	Disc, thermostatic alloy
⑦	Movable arm, spring temper copper alloy
⑧	Contact, movable, silver on copper
⑨	Contact, stationary, silver on copper
⑩	Slug, plated steel
⑪	Cover, polyester (UL 94 V -0 rated)
⑫	Pin connector, plated copper alloy (To engage 2.33/2.66 mm dia. pin)

Figure 19

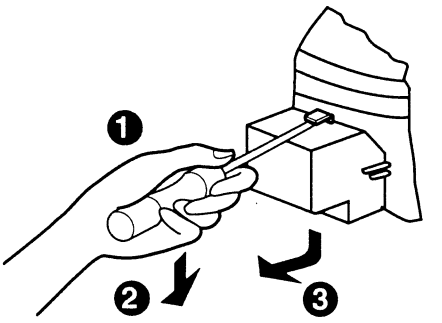
4-4 TO REMOVE THE COVER PTC



(1) Remove the Cover Back M/C.

(2) Disconnect two housing upper side of comp connected in.

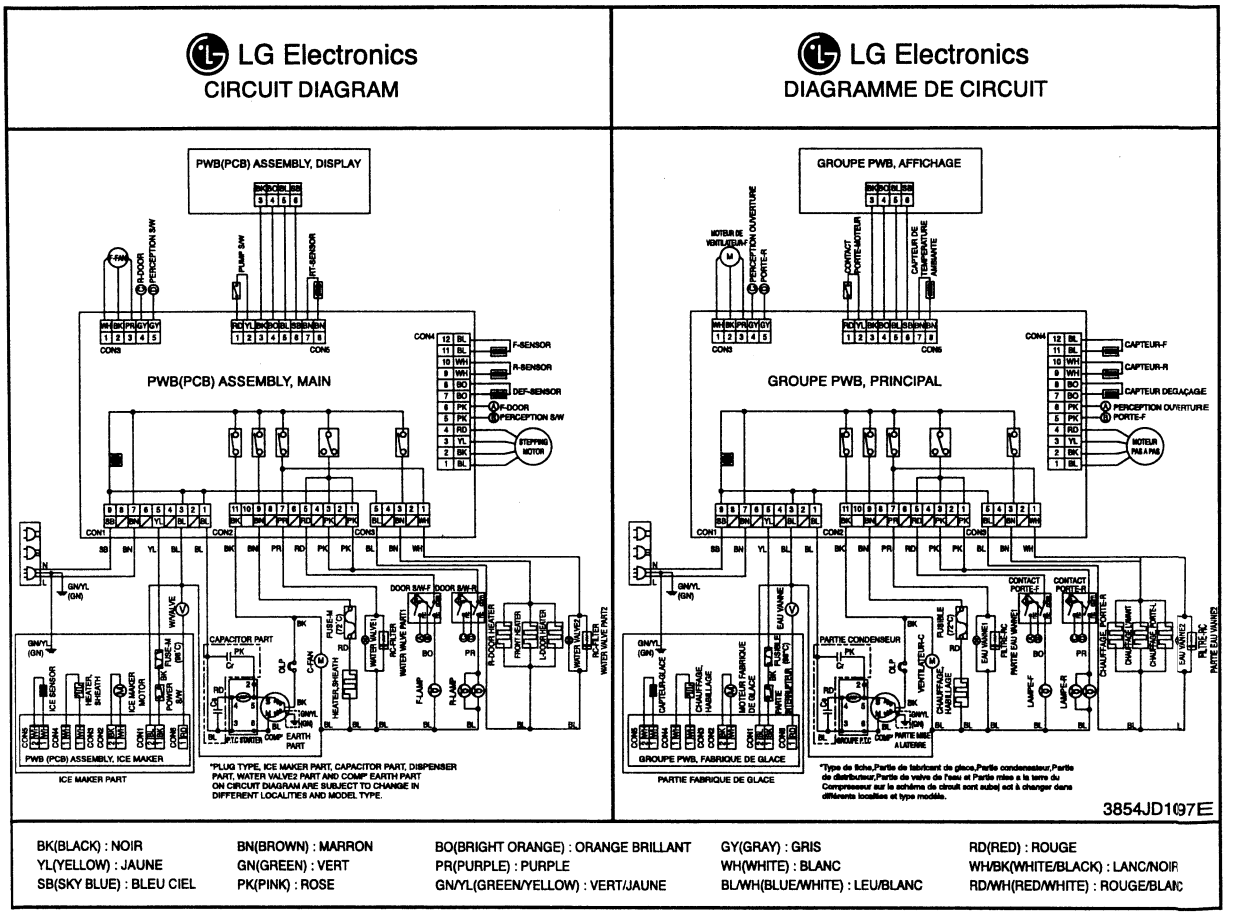
(3) Loosen two screws on comp base.



(4) Use a L-shaped flap tool to pry off the cover.

(5) Assembly in reverse order of disassembly.

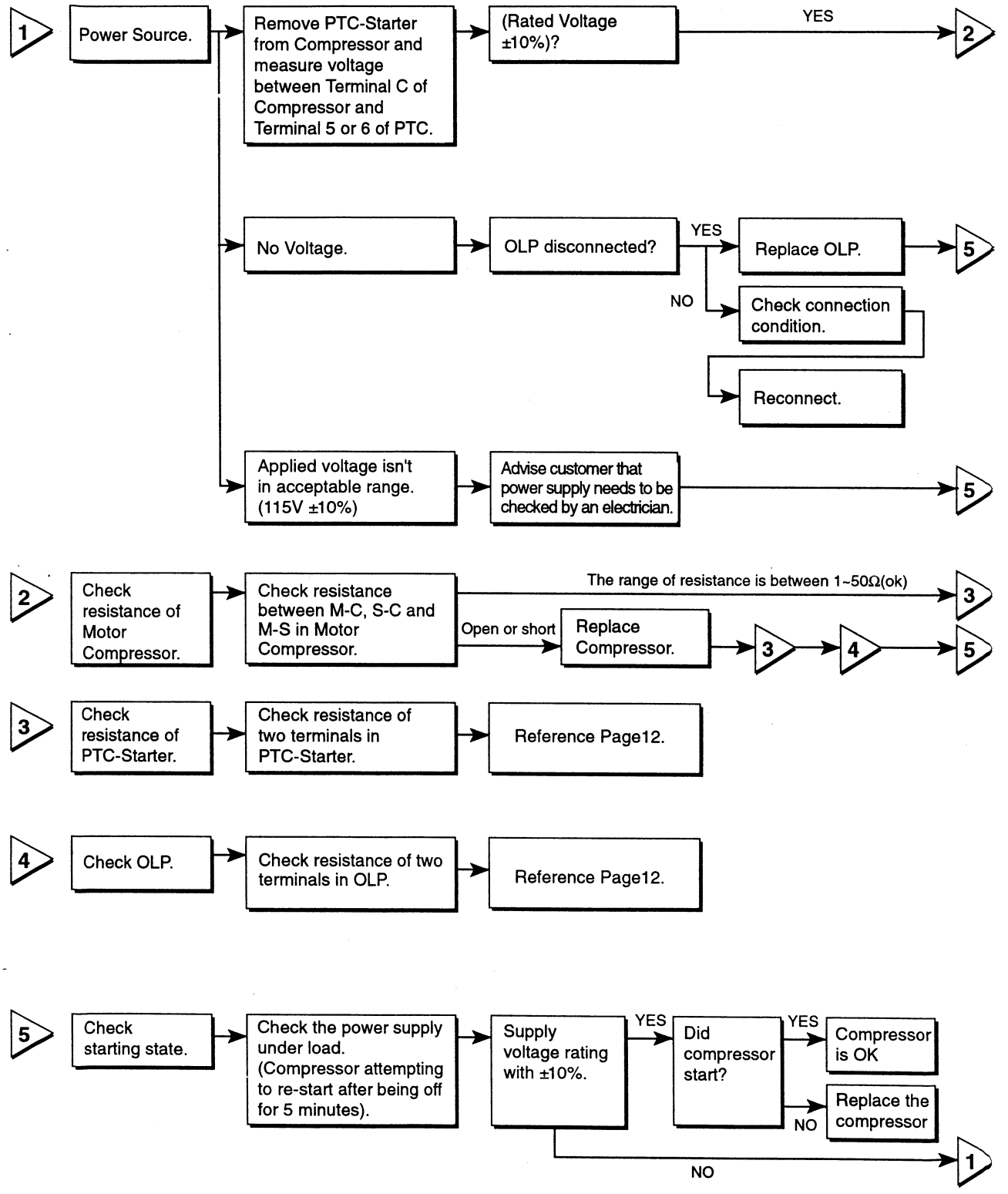
5. CIRCUIT DIAGRAM



BK(BLACK) : NOIR	BN(BROWN) : MARRON	BO(BRIGHT ORANGE) : ORANGE BRILLANT	GY(GRAY) : GRIS	RD(RED) : ROUGE
YL(YELLOW) : JAUNE	GN(GREEN) : VERT	PR(PURPLE) : PURPLE	WH(WHITE) : BLANC	WH/BK(WHITE/BLACK) : LANC/NOIR
SB(SKY BLUE) : BLEU CIEL	PK(PINK) : ROSE	GN/YL(GREEN/YELLOW) : VERT/JAUNE	BL/WH(BLUE/WHITE) : LEU/BLANC	RD/WH(RED/WHITE) : ROUGE/BLANC

6. TROUBLESHOOTING

6-1 COMPRESSOR AND ELECTRIC COMPONENTS



6-2 PTC AND OLP

Normal operation of Compressor is impossible or poor.

→ Separate PTC-Starter from Compressor and measure resistance between No. 5 and 6 of PTC-Starter with a Tester. (Figure 20)

→ Observation value is 115V/60Hz : 6.8Ω±30%

→ The resistance value is 0Ω (short) or ∞ (open).

→ Replace PTC-Starter.

→ Separate OLP from Compressor and check resistance value between two terminals of OLP with a Tester. (Figure 21)

→ Shows continuity → Check another electric component.

→ Open → Replace OLP.

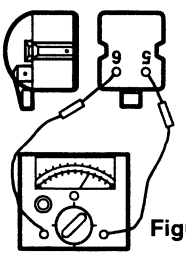


Figure 20

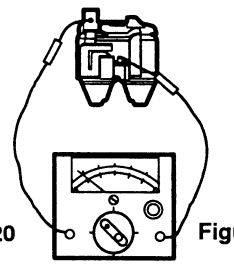
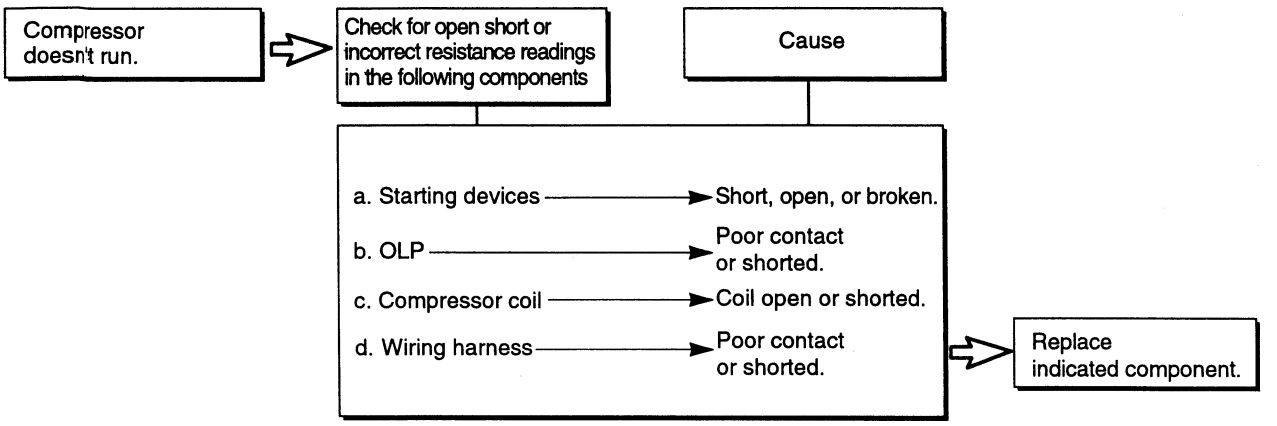


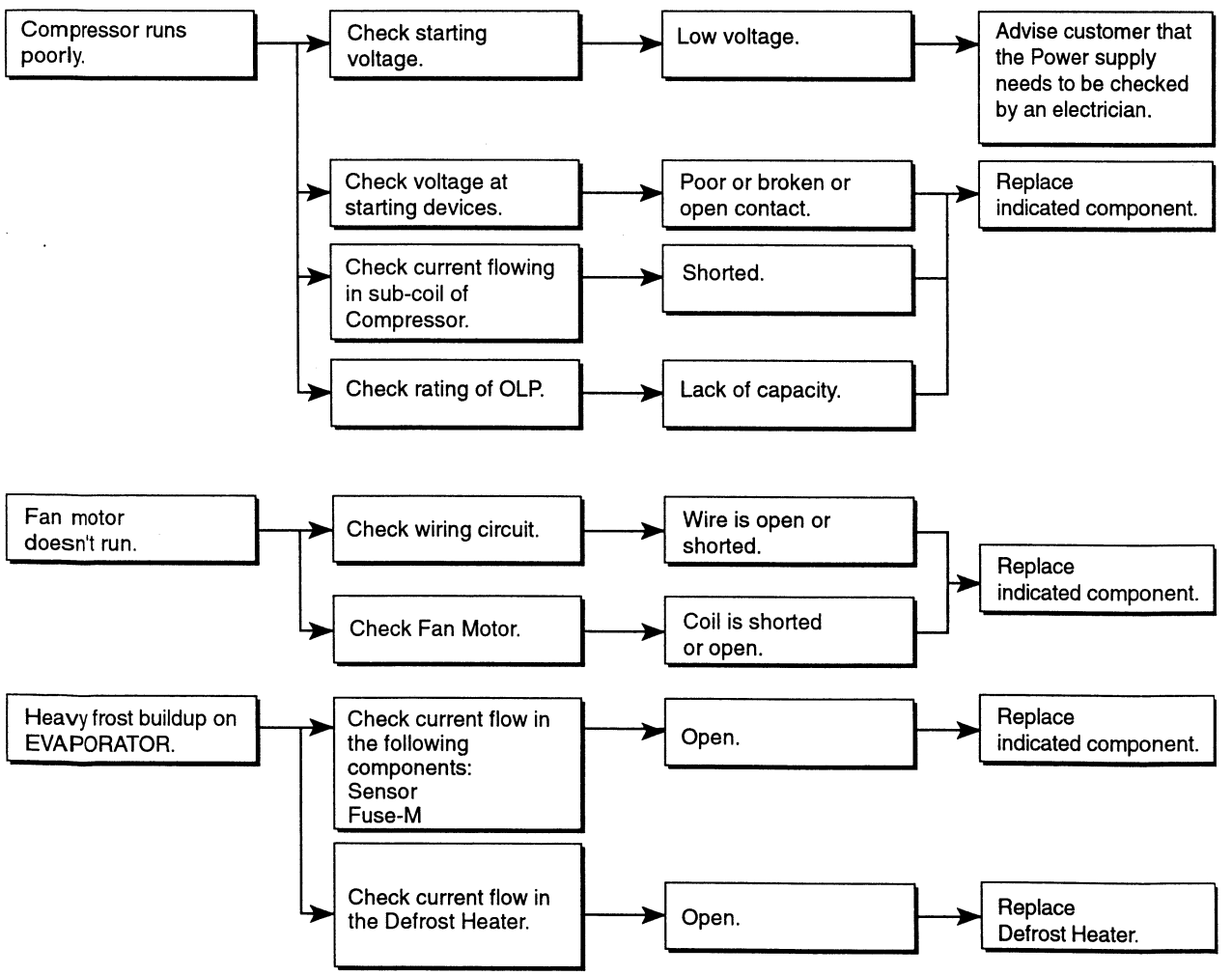
Figure 21

6-3 OTHER ELECTRICAL COMPONENTS

▼ Not cooling at all



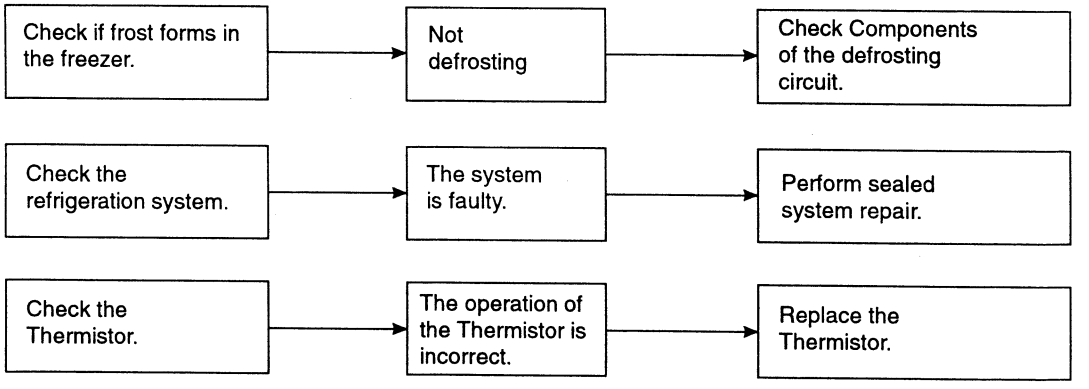
▼ Poor cooling performance


Compressor runs poorly.
Check starting voltage.
Low voltage.
Advise customer that the Power supply needs to be checked by an electrician.
Check voltage at starting devices.
Poor or broken or open contact.
Replace indicated component.
Check current flowing in sub-coil of Compressor.
Shorted.
Check rating of OLP.
Lack of capacity.
Fan motor doesn't run.
Check wiring circuit.
Wire is open or shorted.
Replace indicated component.
Check Fan Motor.
Coil is shorted or open.
Heavy frost buildup on EVAPORATOR.
Check current flow in the following components: Sensor Fuse-M
Open.
Replace indicated component.
Check current flow in the Defrost Heater.
Open.
Replace Defrost Heater.

6-4 SERVICE DIAGNOSIS CHART

COMPLAINT	POINTS TO BE CHECKED	REMEDY
No Cooling.	• Is the power cord unplugged from the outlet? • Check if the power switch is set to OFF. • Check if the fuse of the power switch is shorted. • Measure the voltage of the power outlet.	• Plug into the outlet. • Set the switch to ON. • Replace the fuse. • If the voltage is low, correct the wiring.
Cools poorly.	• Check if the unit is placed too close to the wall. • Check if the unit is placed too close to the stove, gas cooker, or in direct sunlight. • Is the ambient temperature too high or the room door closed? • Check if food put in the refrigerator is hot. • Did you open the door of the unit too often or check if the door is sealed properly? • Check if the Control is set to **Warm position**.	• Place the unit about 4 inches (10 cm) from the wall. • Place the unit away from these heat sources. • Lower the ambient temperature. • Put in foods after they have cooled down. • Don't open the door too often and close it firmly. • Set the control to **Recommended position**.
Food in the Refrigerator is frozen.	• Is food placed in the cooling air outlet? • Check if the control is set to **colder position**. • Is the ambient temperature below 5°C?	• Place foods in the high-temperature section. (front part) • Set the control to **Recommended position**. • Set the control to **Warm position**.
Condensation or ice forms inside the unit.	• Is liquid food sealed? • Check if food put in the refrigerator is hot. • Did you open the door of the unit too often or check if the door is sealed properly?	• Seal liquid foods with wrap. • Put in foods after they have cooled down. • Don't open the door too often and close it firmly.
Condensation forms in the Exterior Case.	• Check if the ambient temperature and humidity of the surrounding air are high. • Is there a gap in the door gasket?	• Wipe moisture with a dry cloth. It will disappear in low temperature and humidity. • Fill up the gap.
There is abnormal noise.	• Is the unit positioned in a firm and even place? • Are any unnecessary objects placed in the back side of the unit? • Check if the Drip Tray is not firmly fixed. • Check if the cover of the compressor enclosure in the lower front side is taken out.	• Adjust the Leveling Screw, and position the refrigerator in a firm place. • Remove the objects. • Fix the Drip Tray firmly in the original position. • Place the cover in its original position.
Door does not close well.	• Check if the door gasket is dirty with an item like juice. • Is the refrigerator level? • Is there too much food in the refrigerator?	• Clean the door gasket. • Position in a firm place and level the Leveling Screw. • Make sure food stored in shelves does not prevent the door from closing.
Ice and foods smell unpleasant.	• Check if the inside of the unit is dirty. • Are foods with a strong odor unwrapped? • The unit smells of plastic.	• Clean the inside of the unit. • Wrap foods that have a strong odor. • New products smell of plastic, but this will go away after 1-2 weeks.

● Other possible problems:

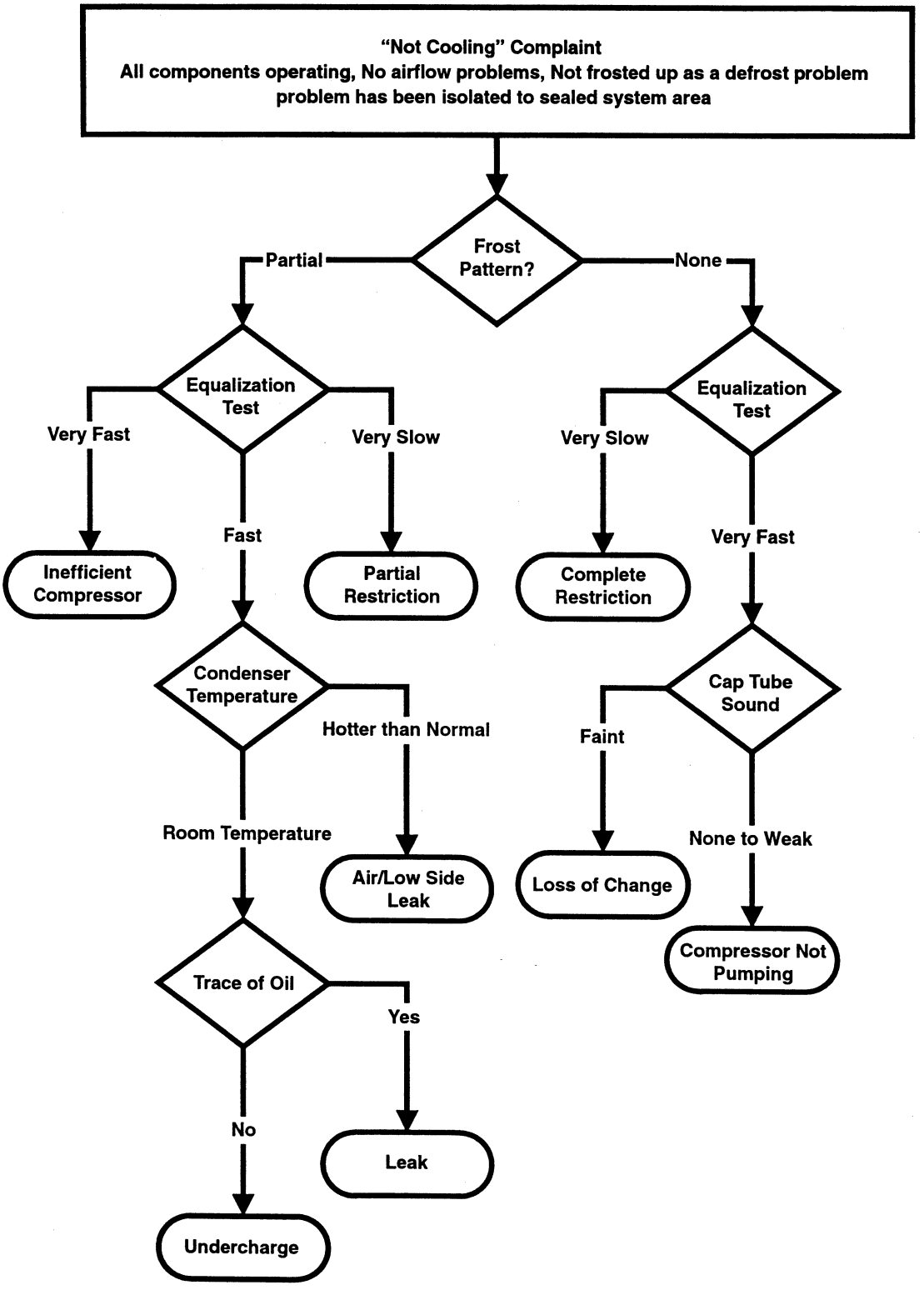

Check if frost forms in the freezer.
Not defrosting
Check Components of the defrosting circuit.
Check the refrigeration system.
The system is faulty.
Perform sealed system repair.
Check the Thermistor.
The operation of the Thermistor is incorrect.
Replace the Thermistor.

6-5 REFRIGERATION CYCLE

▼ **Troubleshooting Chart**

CAUSE		STATE OF THE UNIT	STATE OF THE EVAPORATOR	TEMPERATURE OF THE COMPRESSOR	REMARKS
LEAKAGE	PARTIAL LEAKAGE	Freezer compartment and Refrigerator don't cool normally.	Low flowing sound of Refrigerant is heard and frost forms in inlet only.	A little higher than ambient temperature.	• Refrigerant level is low due to a leak. • Normal cooling is possible by restoring the normal amount of refrigerant and repairing the leak.
	COMPLETE LEAKAGE	Freezer compartment and Refrigerator don't cool normally.	Flowing sound of refrigerant is not heard and frost isn't formed.	Equal to ambient temperature.	• No discharging of Refrigerant. • Normal cooling is possible by restoring the normal amount of refrigerant and repairing the leak.
CLOGGED BY DUST	PARTIAL CLOG	Freezer compartment and Refrigerator don't cool normally.	Flowing sound of refrigerant is heard and frost forms in inlet only.	A little higher than ambient temperature.	• Normal discharging of the refrigerant. • The capillary tube is faulty.
	WHOLE CLOG	Freezer compartment and Refrigerator don't cool.	Flowing sound of refrigerant is not heard and frost isn't formed.	Equal to ambient temperature.	• Normal discharging of the Refrigerant.
MOISTURE CLOG		Cooling operation stops periodically.	Flowing sound of refrigerant is not heard and frost melts.	Lower than ambient temperature.	• Cooling operation restarts when heating the inlet of the capillary tube.
DEFECTIVE COMPRESSION	COMP-RESSION	Freezer and Refrigerator don't cool.	Low flowing sound of refrigerant is heard and frost forms in inlet only.	A little higher than ambient temperature.	• Low pressure at high side of compressor due to low refrigerant level.
	NO COMP-RESSION	No compressing operation.	Flowing sound of refrigerant is not heard and there is no frost.	Equal to ambient temperature.	• No pressure in the high pressure part of the compressor.

6-5-1 SEALED SYSTEM DIAGNOSIS

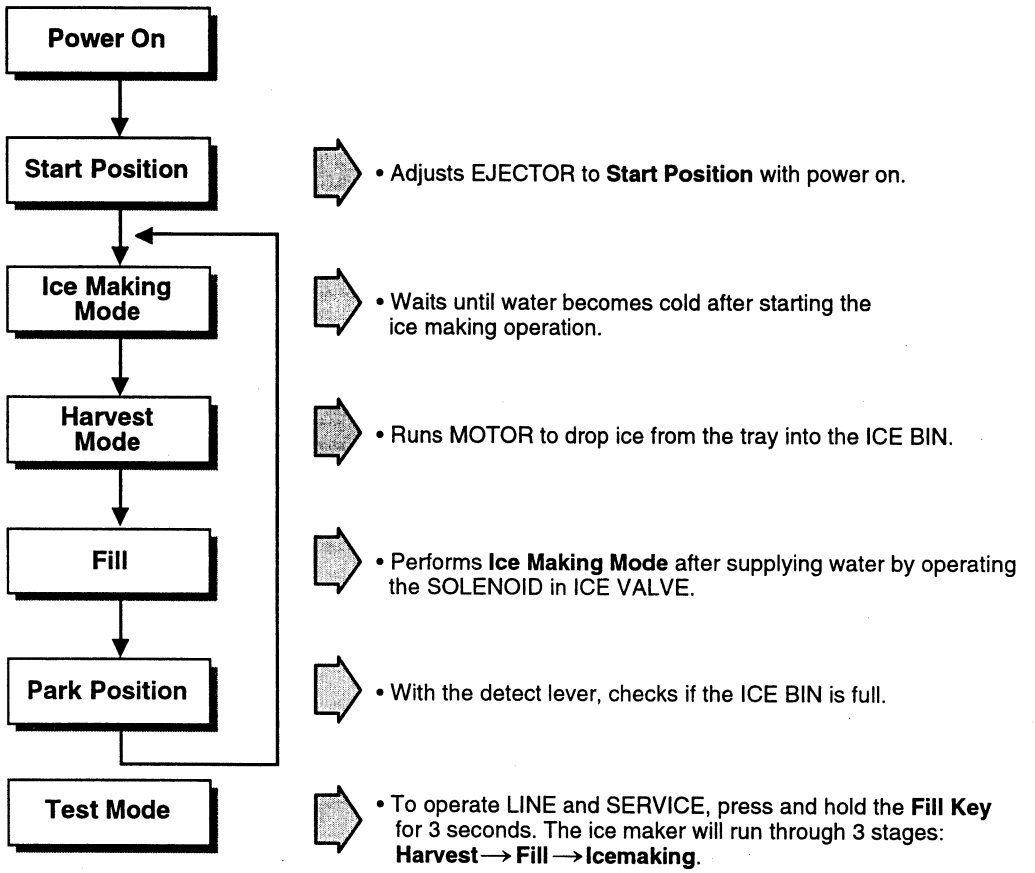


(The equalization test is trying to restart a compressor using a start kit after it has been operating.)

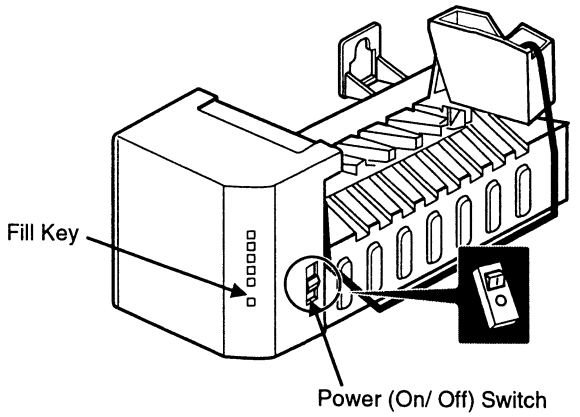
7. OPERATION PRINCIPLE AND REPAIR METHOD OF ICEMAKER

7-1 OPERATION PRINCIPLE

7-1-1 Operation Principle of IceMaker


Power On
Start Position
Ice Making Mode
Harvest Mode
Fill
Park Position
Test Mode
• Adjusts EJECTOR to **Start Position** with power on.
• Waits until water becomes cold after starting the ice making operation.
• Runs MOTOR to drop ice from the tray into the ICE BIN.
• Performs **Ice Making Mode** after supplying water by operating the SOLENOID in ICE VALVE.
• With the detect lever, checks if the ICE BIN is full.
• To operate LINE and SERVICE, press and hold the **Fill Key** for 3 seconds. The ice maker will run through 3 stages: **Harvest → Fill → Icemaking**.

1. Turning the Icemaker stop switch off (O) stops the ice making function.
2. Setting the Icemaker switch to OFF and then turning it back on will reset the icemaker control.



7-2 ICE MAKER FUNCTIONS

7-2-1 Start Position

1. After POWER OFF or Power Outage, check the EJECTOR's position with MICOM initialization to restart.
2. How to check if it is in place:
   - Check **HIGH/LOW** signals from HALL SENSOR in MICOM PIN.
3. Control Method to check if it is in place:
   (1) EJECTOR is in place,
      - It is an initialized control, so the mode can be changed to ice making control.
   (2) EJECTOR isn't in place:
      A. If EJECTOR is back in place within 2 minutes with the motor on, it is being initialized. If not, go to Step B.
      B. If EJECTOR is back in place within 18 minutes after the heater turns from ON to OFF, it is being initialized. If not, it is not functioning. Repeat Step B with Heater and Motor off.

7-2-2 Ice Making Mode

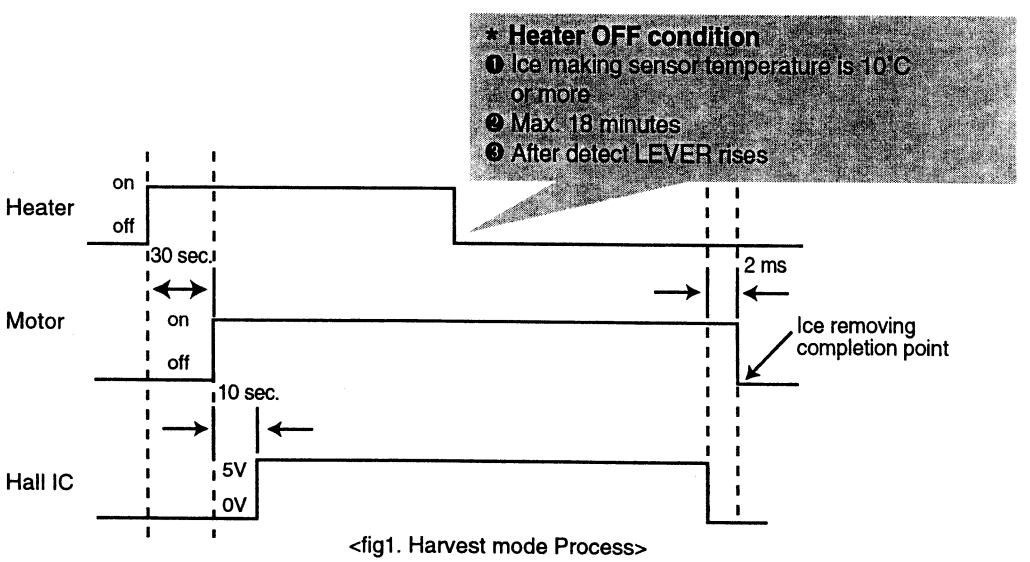
1. Ice Making refers to the freezing of supplied water in the ice trays. Complete freezing is assured by measuring the temperature of the Tray with Ice-Making SENSOR.
2. Ice Making starts after completion of the water fill operation.
3. The Ice Making function is completed when the sensor reaches -7°C, 60 to 240 minutes after starting.
4. If the temperature sensor is defective, the ice-making function will be completed in 4 hours.

NOTE : After Icemaker Power is ON, the Icemaker heater will be on for test for 9 sec.

7-2-3 Harvest Mode

1. Harvest (Ice removing) refers to the operation of dropping cubes into the ice bin from the tray when ice-making has completed.
2. Harvest mode:
   (1) The Heater is ON for 30 seconds, then the motor starts.
   (2) After performing Step 1 (the Heater is turned OFF), the Ejector will be back in place wthin 18 minutes. (Hall SENSOR sign = OV). Ice removal is then complete. Then the Ice Maker cycles to the Fill Mode. The water supply fails to start, it is not functioning. Put the Heater and Motor in the off position. Restart every 2 hours. (Refer to fig.1)

NOTE : If the motor malfunctions and starts before the detect lever rises, MICOM regards the Ice-Removing phase as completed. Water then starts flowing. To prevent this, MICOM doesn't switch to water-supply mode, but restarts the ice-removing mode. If this happens 3 times, the motor is malfunctioning and you should stop the loads (Heater, Motor). Then restart the Ice-Removing mode every 2 hours. (See Step 2 above.)



<fig1. Harvest mode Process>

7-2-4 Fill / Park Position

1. Once a normal harvest mode has been completed, the water solenoid will be activated.
2. The amount of water is adjusted by pressing the Fill Key repeatedly. This changes the time allowed for fill as illustrated in the table below.

<Water supply amount TABLE>

STAGE	TIME TO SUPPLY	INDICATIONS	REMARKS
1	6 sec.		The water amount will vary depending on the water control Switch setting, as well as the water pressure of the connected water line.
2	6.5 sec.		
3	7 sec.		
4	7.5 sec.		
5	8 sec.		

7-2-5 Function TEST

1. This is a compulsory operation for TEST, SVC, cleaning, etc. It is operated by pressing and holding the Fill Key for 3 seconds.
2. The test works only in the Ice Making Mode. It cannot be entered from the Harvest or Fill mode. (If there is an ERROR, it can only be checked in the TEST mode.)
3. **Caution!** If the test is performed before water in the Maker is frozen, the Ejector will pass through the water. When the Fill mode begins (Stage 4), unless the water supply has been shut off, added water will overflow into the ice bin. If the control doesn't operate normally in the TEST mode, check and repair as needed.
4. After water is supplied, the normal CYCLE is followed: **ice making → Harvest → Fill → Park Position**.
5. Five seconds after Stage 5 is completed, the Ice Maker returns to MICOM control. The time needed to supply water resets to the pre- test setting.

<Diagnosis TABLE>

STAGE	ITEMS	INDICATOR	REMARKS
1	HEATER		Five seconds after heater starts, heater will go off if temperature recorded by sensor is 10°C or lever is in up position.
2	MOTOR		Five seconds after heater starts, you can confirm that motor is moving.
3	HALL IC I (detection of position)		You can confirm Hall Ic detection of position.
4	VALVE		Two seconds after detection of initial position, you can confirm that valve is on.
5	HALL IC II (detection of full-filled Ice)		You can check whether hall is sensing Full ice condition. (If there is a full-filled error, the fifth LED is not on.)
6	Reset	Return to Status prior to TEST MODE	Five seconds after fifth stage is completed, the icemaker resets to initial status.

7-3 DEFECT DIAGNOSIS FUNCTION

7-3-1 ERROR CODES shown on Ice Maker water supply control panel

NO	DIVISION	INDICATOR	CONTENTS	REMARKS
1	Normal	Mark time to supply	None	Display switch operates properly
2	Ice-Making Sensor malfunction		Open or short-circuited wire	Make sure that the wire on each sensor is connected.
3	Ice Maker Kit malfunction		When ejector blades don't reach park position over 18 minutes after Harvest Mode starts.	Check HALL IC/MOTOR/ HEATER/RELAY

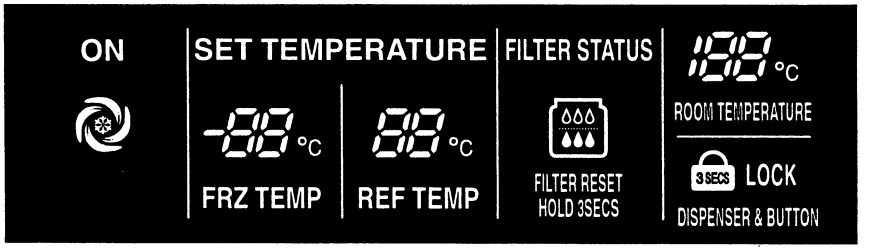
ERROR indicators in table can be checked only in TEST mode.

8. DESCRIPTION OF FUNCTION & CIRCUIT OF MICOM

8-1 FUNCTION

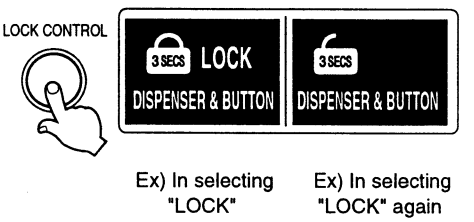
8-1-1 Function

1. When the appliance is plugged in, it is set to 3°C for Refrigerator and -18°C for freezer.
   You can adjust the Refrigerator and the Freezer control temperature by pressing the ADJUST button.
2. When the power is initially applied or restored after a power failure, it is automatically set to "3" & "-18".



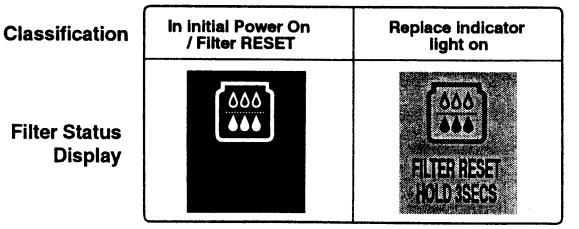
8-1-2 Lock function (dispenser and display button lock)

1. When the refrigerator is first turned on, the buttons are not locked. The display panel shows the padlock unlocked icon.
2. To lock the display, the dispenser, and the control panel, press and hold the LOCK button for 3 seconds. The locked padlock icon is displayed with the word "LOCK" printed beside it.
3. The LOCK button is the only control feature that remains active in the locked state. The buzzer sound, other control buttons, and the dispenser are deactivated.
4. To release from the locked state, press and hold the LOCK button again for 3 seconds.



8-1-3 Filter condition display function

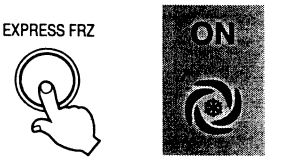
1. There is a replacement indicator light for the water filter cartridge on the dispenser.
2. Water filter needs replacement once six months or about 28,000 seconds of using water filter.
3. Water filter light and "FILTER RESET HOLD 3 SECS" text turn on to tell you need to replace the filter soon.
4. After replace the filter, press and hold the lock button more than 3 seconds.
   Then water filter light and "FILTER RESET HOLD 3 SECS" text turn off with reset status.



8-1-4 Express freezing selection

Please select this function for quick freezing.

- Function is repeated following below whenever pressing Express FRZ button.
- Expressing freezer function automatically turns off after a fixed time passes.



8-1-5 CONTROL OF FREEZER FAN MOTOR

1. Freezer fan motor has high and standard speeds.
2. High speed is used at power-up, for express freezing, and when refrigerator is overloaded. Standard speeds is used for general purposes.
3. To improve cooling speed, the RPM of the freezer fan motor change from normal speed to high.
4. High speed (2700RPM) : Initial power on or load corresponding operation, express freezing. Normal speed (2400RPM) : General working conditions.
5. Fan motor stops when refrigerator or freezer door opens.

8-1-6 EXPRESS FREEZING

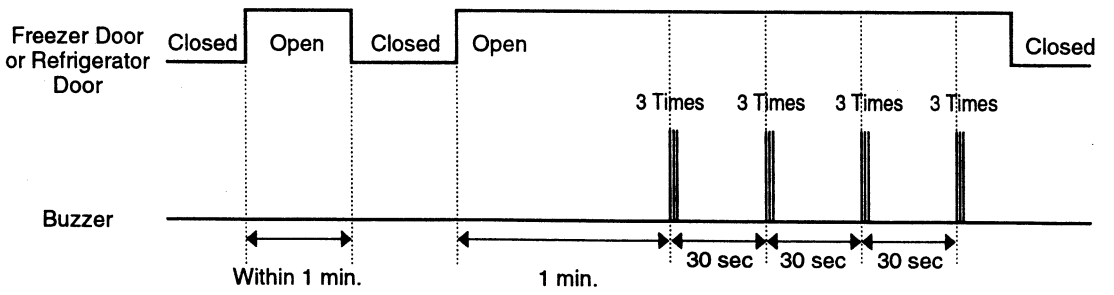
1. The purpose of this function is to intensify the cooling speed of freezer and to increase the amount of ice.
2. Whenever selection switch is pressed, selection/release, the LED will turn ON or OFF.
3. If there is a power outage and the refrigerator is powered on again, EXPRESS FREEZING will be canceled.
4. To activate this function, press the Express Freezing key and the LED will turn ON. This function will remain activated for 24 hrs. The first three hours the compressor and Freezer Fan will be ON. The next 21 hours the freezer will be controlled at the lowest temperature. After 24 hours or if the Express Freezing key is pressed again, the freezer will return to its previous temperature.
5. During the first 3 hours:
   (1) Compressor and freezer fan (HIGH RPM) run continuously.
   (2) If a defrost cycle begins during the first 90 minutes of Express Freezing, the Express Freeze cycle will complete its cycle after defrosting has ended.
   If the defrost cycle begins when Express Freeze has run for more than 90 minutes, Express Freeze will run for two hours after the defrost is completed.
   (3) If EXPRESS FREEZING is pressed during defrost, EXPRESS FREEZING LED is on but this function will start seven minutes after defrost is completed and it shall operate for three hours.
   (4) If EXPRESS FREEZING is selected within seven minutes after compressor has stopped, the compressor (compressor delays seven minutes) shall start after the balance of the delay time.
   (5) The fan motor in the freezer compartment runs at high speed during EXPRESS FREEZING .
6. For the rest of the 21 hours, the freezer will be controlled at the lowest temperature.

8-1-7 REFRIGERATOR LAMP AUTO OFF

1. To avoid heat damage caused by the lamp, it is turned off automatically when the refrigerator door is open for more than 7 minutes.

8-1-8 Alarm for Open Door

1. This feature sounds a buzzer when the freezer or refrigerator door is not closed within 1 minute after it is opened.
2. One minute after the door is opened, the buzzer sounds three times each for 1/2 seconds. These tones repeat every 30 seconds.
3. The alarm is cancelled when the freezer or the refrigerator is closed while the buzzer sounds.



8-1-9 Buzzer Sound

When the button on the front Display is pushed, a Ding~ Dong~ sound is produced.
(Refer to the Buzzer Circuit 8-2-3 No. 3)

8-1-10 Defrosting (removing frost)

1. Defrosting starts each time the COMPRESSOR running time reaches 7 hours.
2. For initial power on or for restoring power, defrosting starts when the compressor running time reaches 4 hours.
3. Defrosting stops if the sensor temperature reaches 8°C or more. If the sensor doesn't reach 8°C in 2 hours, the defrost mode is malfunctioning. (Refer to the defect diagnosis function, 8-1-13.)
4. Defrosting won't function if its sensor is defective (wires are cut or short circuited)

8-1-11 Filter Replacement Indication

1. In 6 months after the UNIT (refrigerator) is power on, or after 28,000 seconds of dispenser use, the water filter Indicator LED will be ON.
2. When the water filter indicator LED is illuminated, you should change the water filter. After this, you must press the water filter button for three seconds and you will hear a ding-dong sound.
   The LED will be OFF. This operation will indicate that the UNIT is reset to its initial conditions, so this process is restarted.

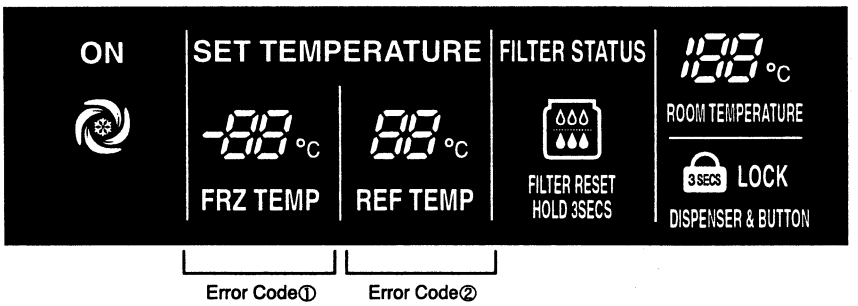
8-1-12 Electrical Parts Are Turned On Sequentially

Electrical parts such as COMP, defrosting heater, freezer FAN, etc. are turned on in the following order to prevent noise and parts damage. Several parts are started at the same time at initial power on and are turned off together when TEST is completed.

OPERATING		ORDERS
Initial power on	Temperature of Defrosting Sensor is 45°C or more (when unit is newly purchased or when moved)	**POWER ON** → (in 1/2 second) **COMP ON** → (in 1/2 second) **Freezer FAN ON**
	Temperature of defrosting sensor is lower than 45°C (when power cuts, SERVICE)	**POWER ON** → (in 1/2 second) **Defrosting heater ON** → (in 10 second) **Defrosting heater OFF** (in 1/2 second) → **COMP ON** → (in 1/2 second) **Freezer FAN ON**
Reset to normal operation from TEST MODE		**Total load OFF** → (in 7 minute) **COMP ON** → (in 1/2 second) **Freezer FAN ON**

8-1-13 Defect Diagnosis Function

1. Automatic diagnosis makes servicing the refrigerator easy.
2. When a defect occurs, the buttons will not operate; but the tones. such as ding. will sound.
3. When the defect CODE removes the sign, it returns to normal operation (RESET).
4. The defect CODE shows on the Refrigerator and Freezer Display.



ERROR CODE on display panel

NO	ITEM	ERROR CODE ①	ERROR CODE ②	CONTENTS	REMARKS
1	Failure of freezer sensor	Er	FS	Cut or short circuit wire	Inspect Connecting wires on each sensor
2	Failure of Refrigerator sensor	Er	rS	Cut or short circuit wire	
3	Failure of defrost sensor	Er	dS	Cut or short circuit wire	
4	Failure of Room Temperature sensor	When Display check mode		Cut or short circuit wire	
5	Failure of defrost mode	Er	dH	When defrost sensor doesn't reach 46°F within 2 hours after starting defrost.	Snapping of defrost heater or Temperature fuse, pull-out of connector (indicated minimum 2 hours after failure occurs)
6	Failure of BLDC Fan Motor at Freezing Compartment.	Er	FF	If there is no fan motor signal for more than 65sec in operation fan motor	Poor motor, hooking to wires of fan, contact of structures to fan, snapping or short circuit of Lead wires

Note 1) Freezer room notch temperature display and refrigerator room notch temperature display (Failure code indication part) are normally indicated in abnormal ambient sensor, and "Er" indicated on the amvient temperature display.

*LED check function: If simultaneously pressing express freezer button and freezing temperature adjustment button for a second, display LED graphics on. If releasing the button, the LED graphic displays the previous status.

8-1-14 TEST Mode

1. The Test mode allows checking the PCB and the function of the product as well as finding out the defective part in case of an error.
2. The test mode is operated by pressing two buttons at Display panel.
3. While in the test mode, the function control button is not recognized, but the recognition tone (beep~) sounds.
4. After exiting the test mode, be sure to reset by unplugging and then plugging in the appliance.
5. If an error, such as a sensor failure, is detected while in the test mode, the test mode is cleared and the error code is displayed.
6. While an error code is displayed, the test mode will not be activated.

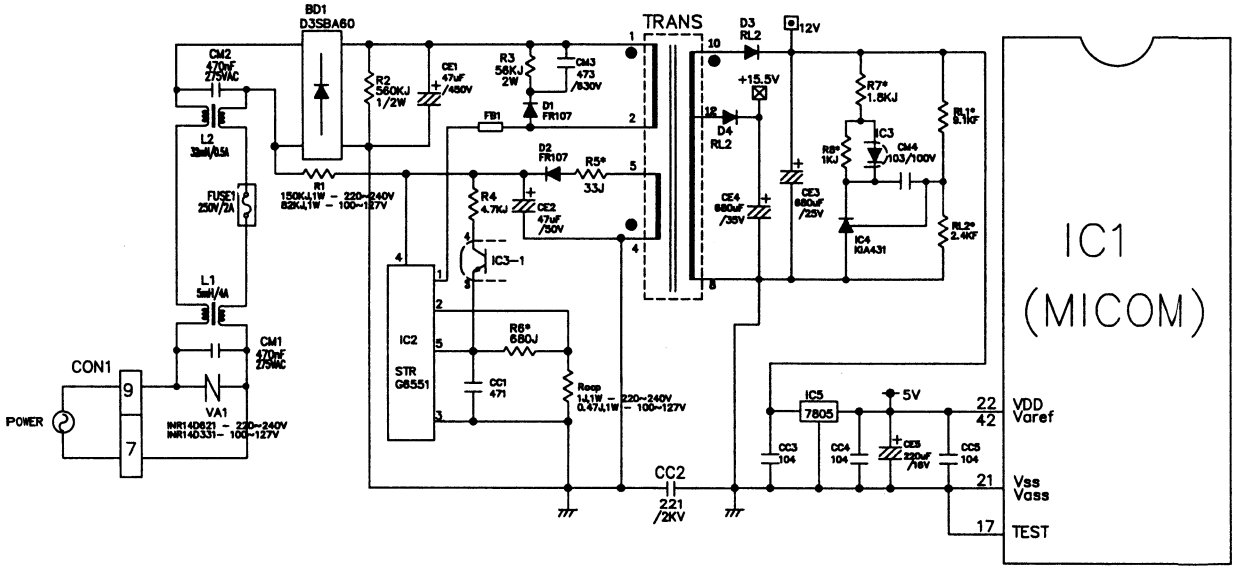
MODE	MANIPULATION	CONTENTS	REMARKS
TEST1	Push Express Freezing Key and LOCK KEY at the same time for 3 seconds OR Push TEST S/W(on the main Board) once.	1) Continuous operation of the COMPRESSOR and the Freezer fan 2) Stepping DAMPER OPEN 3) Defrosting HEATER OFF 4) DISPLAY LED all ON	
TEST2	Push Express Freezing Key and LOCK KEY at the same time for 3 seconds in TEST MODE 1 OR Push TEST S/W once in TEST MODE 1	1) Continuous operation of the COMPRESSOR and the Freezer fan 2) Stepping DAMPER CLOSE 3) Defrosting HEATER OFF 4) DISPLAY LED shows no. 2	
TEST3	Push Express Freezing Key and LOCK KEY at the same time for 3 seconds in TEST MODE 2 OR Push TEST S/W once in TEST MODE 2	1) COMPRESSOR and the Freezer fan OFF 2) Stepping DAMPER CLOSE 3) Defrosting HEATER ON 4) DISPLAY LED shows no. 3	Reset if the Temperature of the Defrosting Sensor is 8°C or more.
Reset	Push Express Freezing Key and LOCK KEY at the same time for 3 seconds in TEST MODE 3 OR Push TEST S/W once in TEST MODE 3	Reset to the previously setting Before TEST MODE.	The compressor will Start after a 7-minute Delay.

* Freezer Fan RPM Variable Check:
  In case the freezer fan is in operation when the express freezer button and freezing temp. button. Control are pressed for more than one second at the same time freezer fan RPM changes. (for example if high speed, to normal speed or if normal speed, to high speed for 30 seconds)
  After 30 seconds, it turns to its original RPM.

* Demonstration MODE:
  1. When the Freezer Temp. Control button and the Refrigerator Temp. Control button are pushed and hold for 3 seconds or longer, it converts to Demonstration Mode.
  2. The Display shows the Demo graphic.
  3. In this status, all Loads are off (Compressor / Fan / Damper / Heater)
     (Even is Demonstration Mode, the refrigerator Lamp automatic off function warks normally and can be demonstrated)
  4. Exit the Demo mode and reset the Display by pressing the Freezer Temp. Control button and the Refrigerator Temp. Control button for 3 seconds or longer.

8-2 PCB FUNCTION

8-2-1 Power Circuit



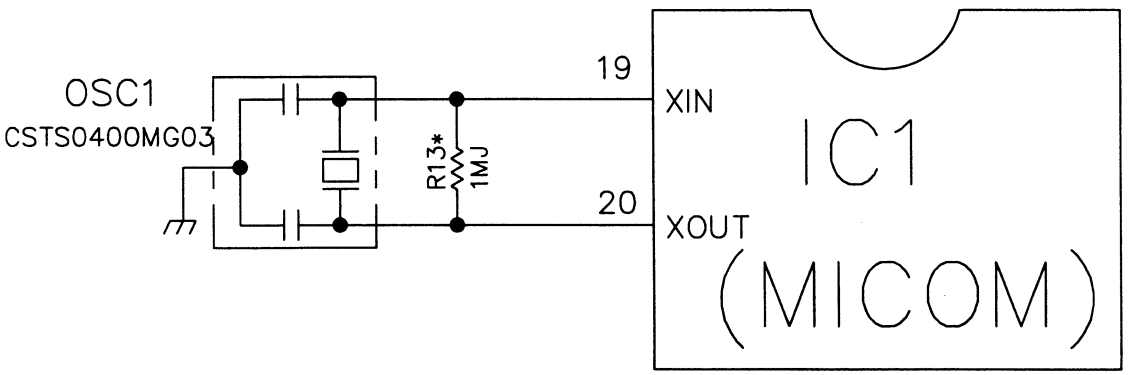
The secondary part of the TRANSFORMER is composed of the power supply for the display, the BLDC FAN Motor drive (15.5 V), the relay drive (12 Vdc) and the MICOM and IC (5 Vdc).

The voltage for each part is as follows:

PART	VA 1	CE 3	CE 4	CE 5
VOLTAGE	115 Vac	12 Vdc	15.5 Vdc	5 V

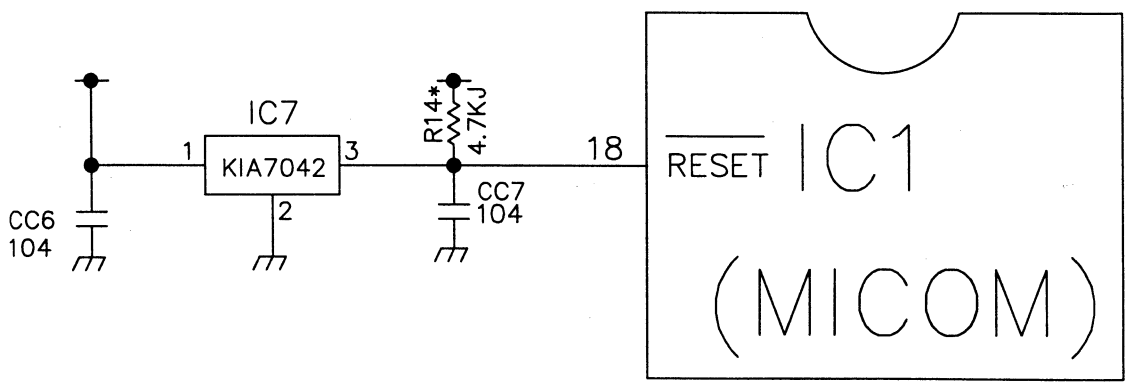
VA1 is a part for preventing over voltage and noise. When 385V or higher power is applied, the inside elements are shot-circuited and broken, resulting in blowout of the fuse in order to protect the elements of the secondary part of the TRANSFORMER.

8-2-2 Oscillation Circuit



This circuit generates the base clock for calculating time and the synchro clock for transmitting data from and to the inside logic elements of the IC1 (MICOM). Be sure to use specified replacement parts, since calculating time by the IC1 may be changed. If changed, the OSC1 SPEC will not work.

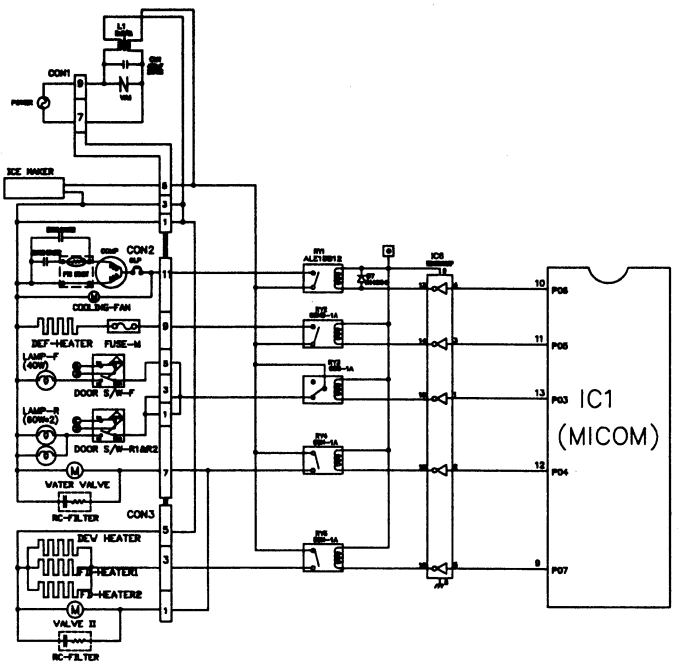
8-2-3 Reset Circuit



The RESET circuit allows all the functions to start at the initial conditions by initializing various parts, including the RAM inside the MICOM (IC1) when the power is initially supplied or the power supply to the MICOM is restored after a momentary power failure. For the initial 10ms of power supply, LOW voltage is applied to the MICOM RESET terminal. During a normal operation, 5V is applied to the RESET terminal. (If a malfunction occurs in the RESET IC, the MICOM will not operate.)

8-2-4 Load / Buzzer Drive & Open Door Detection Circuit

1. Load Drive Condition Check

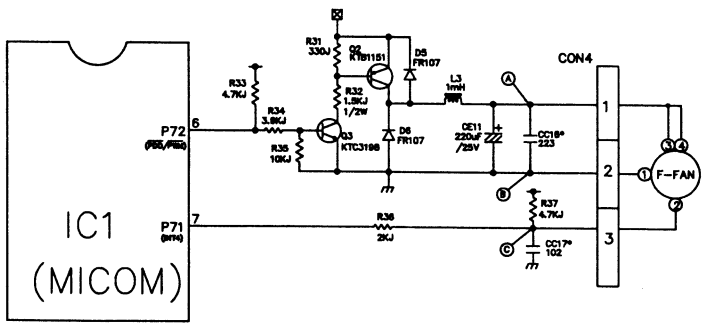


LOAD TYPE		COMP	DEFROSTING HEATER	LAMP	FRENCH DOOR HEATER 1, 2 / DEW HEATER	VALVE
Measurement Location (IC6)		NO.13	NO.14	NO.16	NO.12	NO.15
Condition	ON	1V or below				
	OFF	12V				

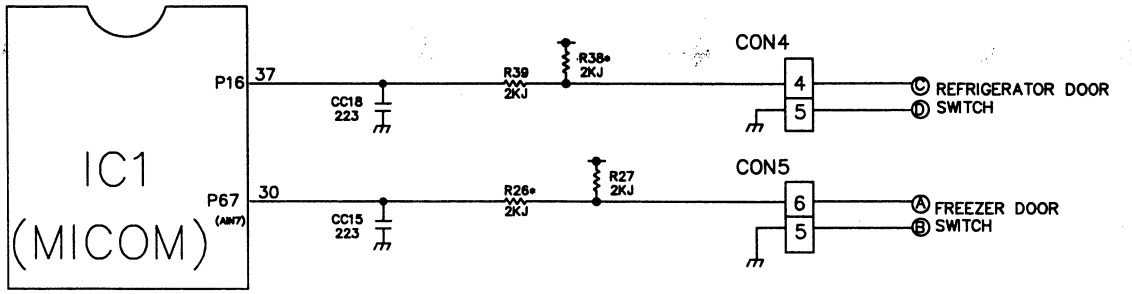
2. Fan motor driving circuit (freezing compartment fan)

1. This circuit makes standby power **0** by cutting off power supplied to ISs inside of the fan motor in the fan motor OFF.
2. This is a circuit to perform a temporary change of speed for the fan motor and applies DC voltage up to 7.5V ~ 16V to motor.
3. This circuit prevents over-driving the fan motor by cutting off power applied to the fan motor in the lock of fan motor by sensing the operation RPM of the fan motor.

	ⓐ part	ⓑ part	ⓒ part
MOTOR OFF	2V or less	0V	5V
MOTOR ON	13V~15V	0V	2V~3V

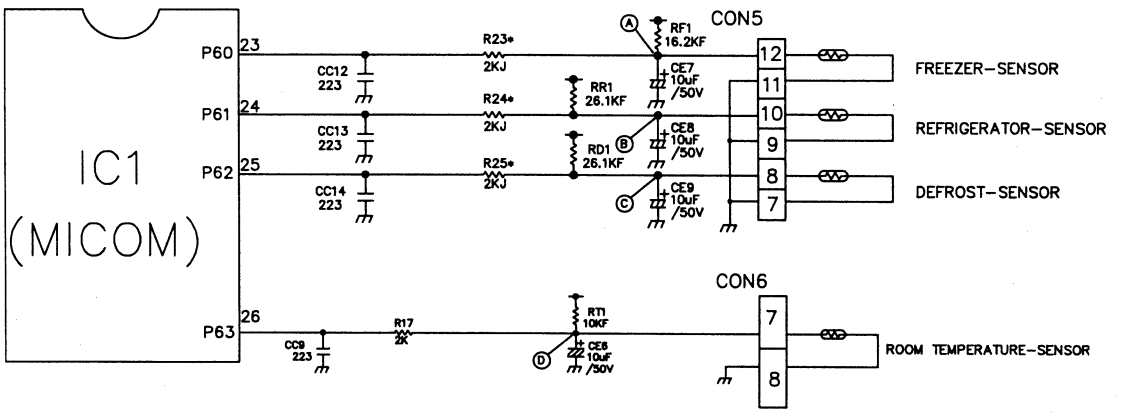


3. Open Door Detection Circuit Check



Measurement Location / Freezer/ Refrigerator Door	(PIN NO.30 & PIN NO.37)
Closed	5 V
Open	0 V

8-2-5 Temperature Sensor Circuit

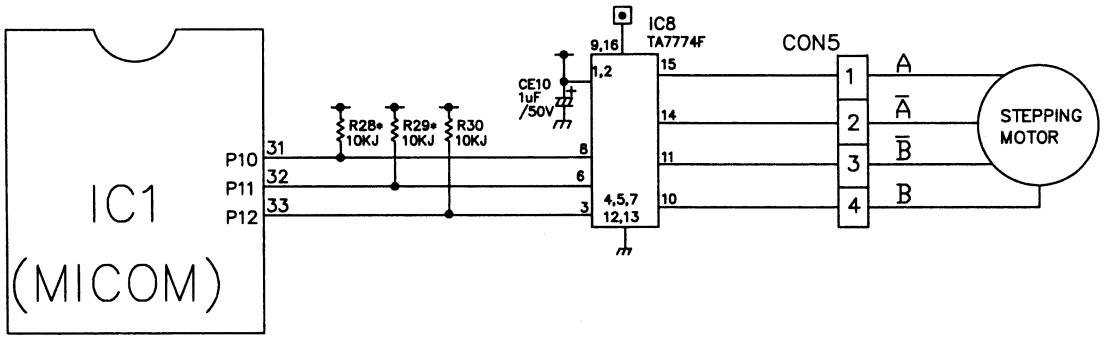


The upper CIRCUIT reads REFRIGERATOR temperature, FREEZER Temperature, and DEFROST-SENSOR temperature for defrosting and the indoor temperature for compensating for the surrounding temperature into MICOM.
OPENING or SHORT state of each TEMPERATURE SENSOR are as follows:

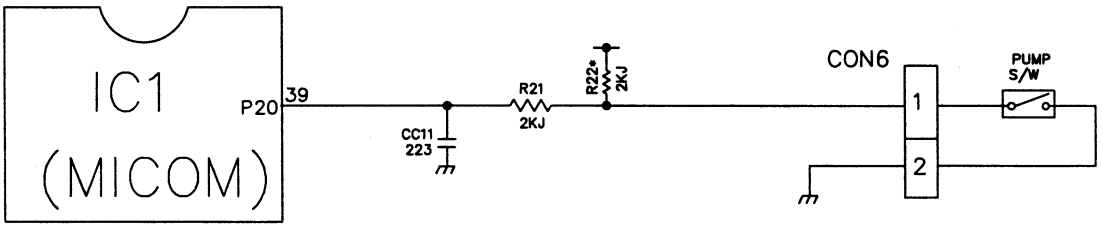
SENSOR	CHECK POINT	NORMAL (-30°C ~ 50°C)	SHORT-CIRCUITED	OPEN
Freezer Sensor	POINT Ⓐ Voltage	0.5 V ~ 4.5 V	0 V	5 V
Refrigerator Sensor	POINT Ⓑ Voltage			
Defrosting Sensor	POINT Ⓒ Voltage			
Room Temperature sensor	POINT Ⓓ Voltage			

8-2-6 Refrigeration Compartment Stepping Motor Damper Circuit

* The circuit shown below is the damper circuit to regulate the refrigerator temperature.

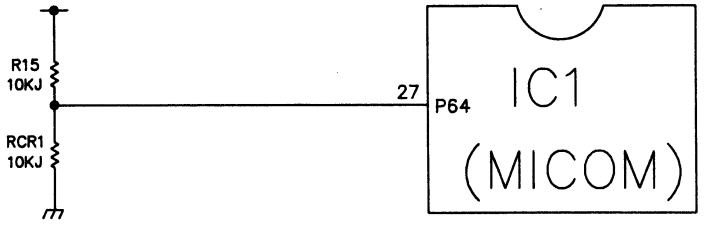


8-2-7 Dispenser Input



8-2-8 Temperature Compensation & Overcooling/Undercooling Compensation Circuit

1. Refrigerator Temperature Compensation



Refrigerator		Remark
Resistance (RCR)	Temperature Compensation	
180 KΩ	+2.5°C	Compensation by raising the temperature ↑
56 KΩ	+2.0°C	
33 KΩ	+1.5°C	
18 KΩ	+1.0°C	
12 KΩ	+0.5°C	
10 KΩ	0 °C	Standard Temperature
8.2 KΩ	-0.5°C	Compensation by lowering the temperature ↓
5.6 KΩ	-1.0°C	
3.3 KΩ	-1.5°C	
2 KΩ	-2.0°C	
470 Ω	-2.5°C	

◗ Table of Temperature Compensation by adjusting the resistance (difference from the current temperature) e.g., If the refrigerator compensation resistance (RCR) is changed from 10K (the current resistance) to 18K (the adjustment resistance), the temperature of the refrigerator rises 33.8°F(+1°C).

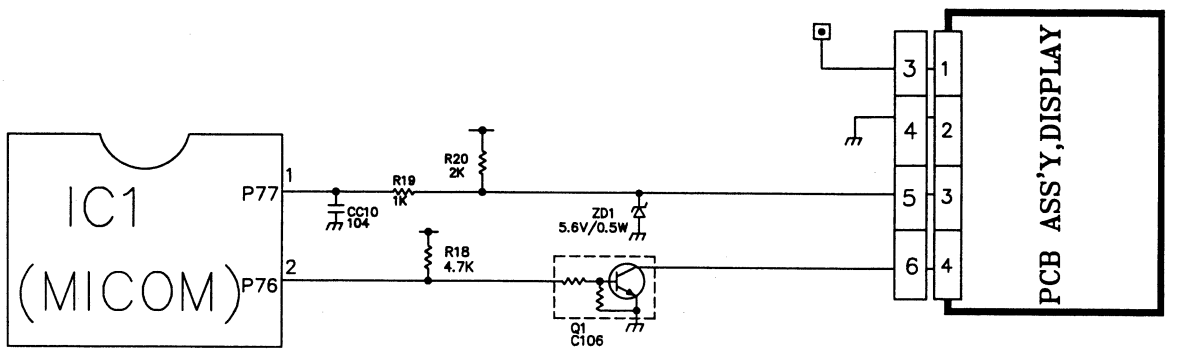
2. The temperature compensation for refrigerator compartment is in the following table:

	Revised resistance / Present resistance	470Ω	2kΩ	3.3kΩ	5.6kΩ	8.2kΩ	10kΩ	12kΩ	18kΩ	33kΩ	56kΩ	180kΩ
Refrigerator (RCR)	470Ω	No change	0.5°C Up	1°C Up	1.5°C Up	2°C Up	2.5°C Up	3°C Up	3.5°C Up	4°C Up	4.5°C Up	5°C Up
	2kΩ	0.5°C Down	No Change	0.5°C Up	1°C Up	1.5°C Up	2°C Up	2.5°C Up	3°C Up	3.5°C Up	4°C Up	4.5°C Up
	3.3kΩ	1°C Down	0.5°C Down	No Change	0.5°C Up	1°C Up	1.5°C Up	2°C Up	2.5°C Up	3°C Up	3.5°C Up	4°C Up
	5.6kΩ	1.5°C Down	1°C Down	0.5°C Down	No Change	0.5°C Up	1°C Up	1.5°C Up	2°C Up	2.5°C Up	3°C Up	3.5°C Up
	8.2kΩ	2°C Down	1.5°C Down	1°C Down	0.5° Down	No Change	0.5°C Up	1°C Up	1.5°C Up	2°C Up	2.5°C Up	3°C Up
	10kΩ	2.5°C Down	2°C Down	1.5°C Down	1°C Down	0.5°C Down	No Change	0.5°C Up	1°C Up	1.5°C Up	2°C Up	2.5°C Up
	12kΩ	3°C Down	2.5°C Down	2°C Down	1.5°C Down	1°C Down	0.5°C Down	No Change	0.5°C Up	1°C Up	1.5°C Up	2°C Up
	18kΩ	3.5°C Down	3°C Down	2.5°C Down	2°C Down	1.5°C Down	1°C Down	0.5°C Down	No Change	0.5°C Up	1°C Up	1.5°C Up
	33kΩ	4°C Down	3.5°C Down	3°C Down	2.5°C Down	2°C Down	1.5°C Down	1°C Down	0.5°C Down	No Change	0.5°C Up	1°C Up
	56kΩ	4.5°C Down	4°C Down	3.5°C Down	3°C Down	2.5°C Down	2°C Down	1.5°C Down	1°C Down	0.5°C Down	No Change	0.5°C Up
	180kΩ	5°C Down	4.5°C Down	4°C Down	3.5°C Down	3°C Down	2.5°C Down	2°C Down	1.5°C Down	1°C Down	0.5°C Down	No Change

NOTE: This circuit is designed to input the necessary temperature compensation values into the MICOM. This adjusts the refrigerator temperature, which is different in each model.

8-2-9 Key Button Input & Display Light-On Circuit

◗ The circuit shown above determines whether a function control key on the operation display is pushed. It also turns on the corresponding function indication LED Module SEVEN SEGMENT DISPLAY. The drive type is the scan type.



8-3 RESISTANCE SPECIFICATION OF SENSOR

TEMPERATURE	RESISTANCE OF FREEZER SENSOR	RESISTANCE OF REFRIGERATOR & DEFROST SENSOR & ROOM SENSOR
- 20 °C	22.3 KΩ	77 KΩ
- 15 °C	16.9 KΩ	60 KΩ
- 10 °C	13.0 KΩ	47.3 KΩ
- 5 °C	10.1 KΩ	38.4 KΩ
0 °C	7.8 KΩ	30 KΩ
+ 5 °C	6.2 KΩ	24.1 KΩ
+ 10 °C	4.9 KΩ	19.5 KΩ
+ 15 °C	3.9 KΩ	15.9 KΩ
+ 20 °C	3.1 KΩ	13 KΩ
+ 25 °C	2.5 KΩ	11 KΩ
+ 30 °C	2.0 KΩ	8.9 KΩ
+ 40 °C	1.4 KΩ	6.2 KΩ
+ 50 °C	0.8 KΩ	4.3 KΩ

- The resistance of the SENSOR has a ±5% common difference.
- Measure the resistance of the SENSOR after leaving it for over 3 minutes in the measuring temperature. This delay is necessary due to sensor response speed.

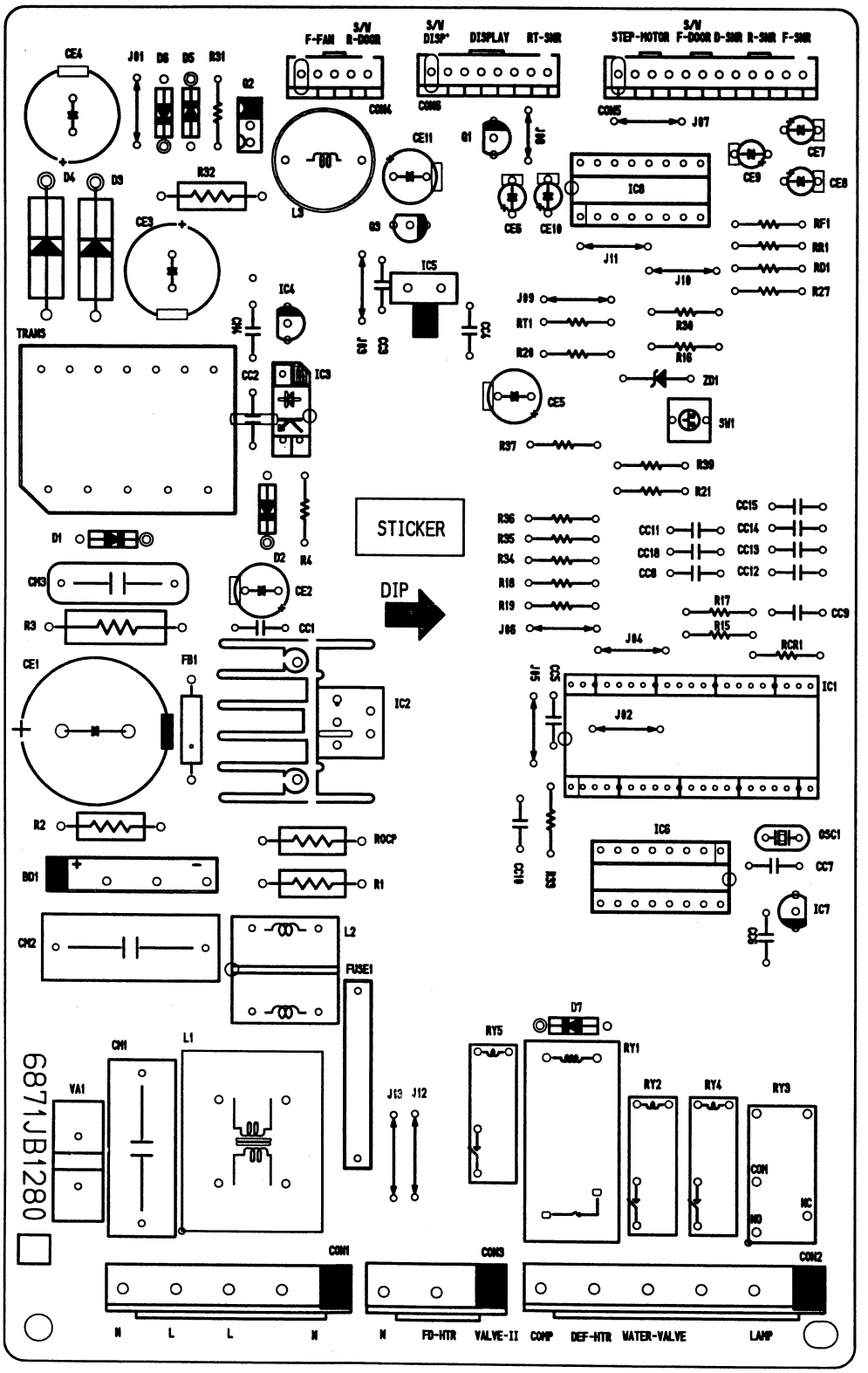
8-4 TROUBLESHOOTING

PROBLEM	INDICATED BY	CHECK	CHECKING METHOD	CAUSE	SOLUTION
POWER SOURCE is poor.	1. The whole DISPLAY LED/SEVEN SEGMENT DISPLAY is off. 2. DISPLAY LED/ SEVEN SEGMENT DISPLAY operates abnormally	1. FREEZER/ REFRIGERATOR.	Check if FREEZER/ REFRIGERATOR DOOR IS OPEN and check display.	POWER SOURCE is poor.	Check outlet Voltage.
		2. If LAMP is dim.	Check visually.	Applied voltage error.	Use boosting TRANS.
		3. The connection of the MAIN PWB CONNECTOR.	Check connection of CONNECTOR.	CONNECTOR connection is poor.	Reconnect CONNECTOR.
				TRANS FUSE is open.	Replace TRANS.
COOLING is poor.	NO COOLING.	1. If the COMPRESSOR operate.	USE TEST MODE1 (forced COOLING). If less than 7 minutes pass after compressor shuts off, don't press the KEY and wait.	COMPRESSOR locked or blocked.	Replace COMPRESSOR.
				OLP, PTC is poor. COMPRESSOR RELAY is poor.	Replace OLP, PTC. Replace MAIN PWB.
				THE CONNECTING WIRE is poor.	Check the connection of the black wire of the MAIN PWB CONNECTOR (CON2).
		2. If refrigerant is leaking.	Measure the amount of frost sticking on EVAPORATOR and the surface temperature of the condenser pipe.	Refrigerant leakage.	Replace the leaking part and replace any lost refrigerant.
	FREEZER TEMPERATURE is incorrect	1. If FAN MOTOR operates.	USE TEST MODE1 (forced COOLING).	FAN MOTOR is poor.	Replace the FAN MOTOR.
				CONNECTING WIRE is poor.	Refer to 8-2-4. 2 and check
		2. If DEFROSTING is normal.	Check the amount of frost sticking on the EVAPORATOR.	DEFROSTING is poor.	See **DEFROSTING is poor**.
		3. If SENSOR is normal.	Check the resistance of the Refrigerator SENSOR.	SENSOR RESISTANCE is poor.	Replace SENSOR.
		4. Door Line contact.	Check the seal when the door is closed.	Door liner damaged.	Replace door liner.

PROBLEM	INDICATED BY	CHECK	CHECKING METHOD	CAUSE	SOLUTION
COOLING is poor.	If REFRIGERATOR TEMPERATURE is too low.	1. If FREEZER TEMPERATURE is normal.	Check is FREEZER TEMPERATURE is too low.		Make sure the DOOR isattached.
		2. If amount of cool air from FAN MOTOR is sufficient.	Make sure that the amount and speed of cool air are sufficient by touching the check supplied on the REFRIGERATOR.	FAN MOTOR is poor.	Replace FAN MOTOR.
				Passage of cool air is blocked.	Remove impurities.
				EVA frozen.	See **DEFROSTING is poor.**
		3. Door Line contact.	Check door seal when door is closed.	Door liner damaged.	Replace Door liner.
DEFROSTING is poor.	NO DEFROSTING.	1. If HEATER emits heat.	USE TEST MODE3 (forced DEFROSTING).	HEATER disconnection.	Replace HEATER.
				TEMPERATURE FUSE disconnection.	Replace TEMPERATURE FUSE.
				Connection is poor.	Check EVAPORATOR connection and wire of MAIN PWB CONNECTOR.
				DEFROST-SENSOR is poor.	Replace DEFROST-SENSOR.
				HEATER RELAY is poor.	Replace RY2 of MAIN PWB.
		2. If DRAIN PIPE is blocked.	Check DRAIN PIPE.	DRAIN PIPE is blocked.	Remove ice and impurities.
					Check HEATER PLATE resistance.
		3. If ice remains after DEFROSTING.	Make sure that DEFROST SENSOR is connected.	Connection is poor.	Reassemble the DEFROST-SENSOR.
			Make sure that FREEZER / REFRIGERATOR DOOR is closed.	DOOR does not close properly.	Reassemble DOOR.
					Replace GASKET.

8-5 MAIN PWB ASSEMBLY AND PARTS LIST

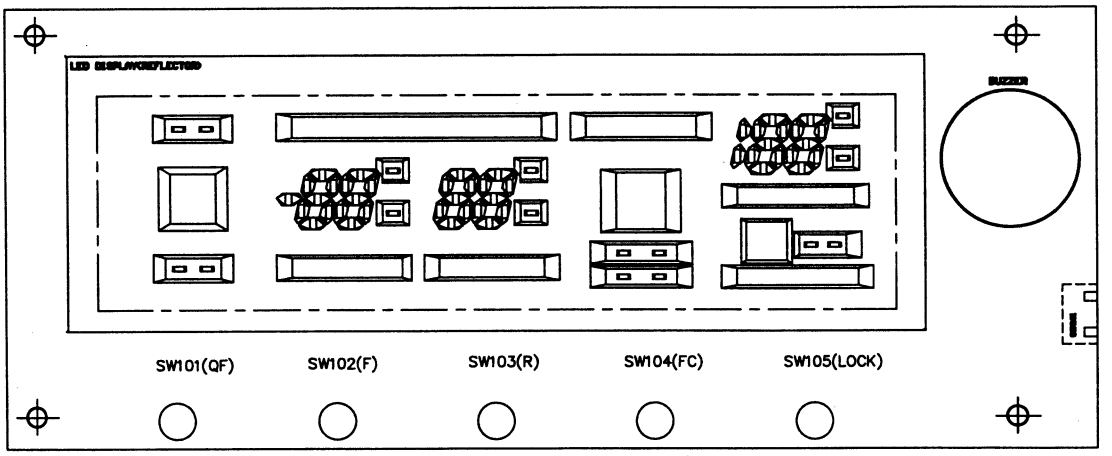
8-5-1 Main PWB Assembly



8-5-2 Replacement Parts List

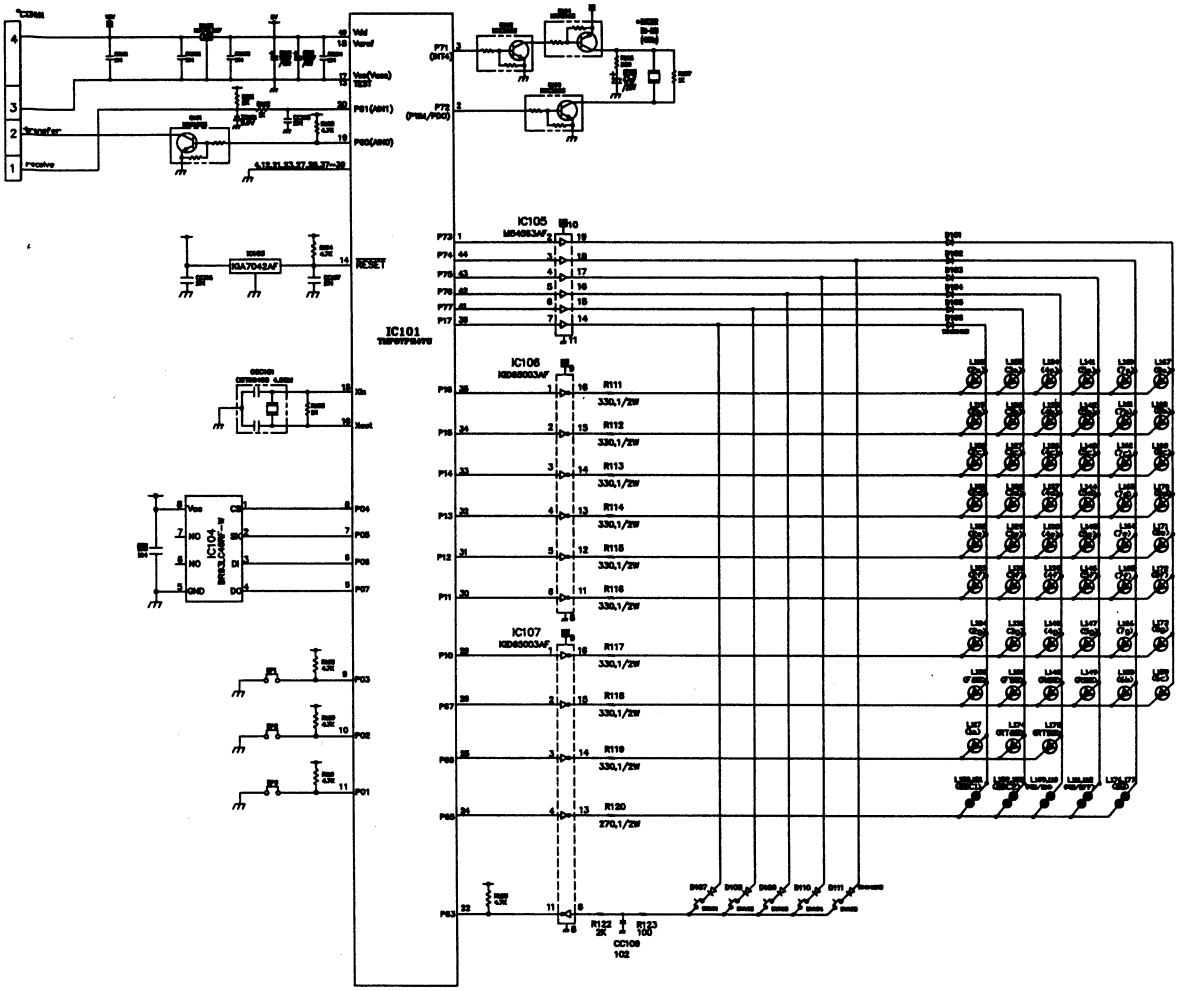
No	P/NO	DESCRIPTION	SPEC	MAKER	REMARK
1	6870JB812BA	PWB(PCB)	BEST BRAVO-PJT	DOO SAN	T=1.6
2	6170JB2012A	TRANSFORMER,SMPS(COIL)	DL-PJT 2.9MH/20V	SAM JU	TRANS
3	6170JB2012B	TRANSFORMER,SMPS(COIL)	GR-207,BLDC 100V-127V	SAM IL	TRANS
4	6630A091060	CONNECTOR (CIRC),VAFER	YV396-09AV	YEON HO	CON1
5	6630VM01111	CONNECTOR (CIRC),VAFER	YV396 YEONHO 11P 3.96MM YV396-11AV (11P-2,4,6,8,10)	YEON HO	CON2
6	6630A091058	CONNECTOR (CIRC),VAFER	YV396-05AV	YEON HO	CON3
7	6630JB80048	CONNECTOR (CIRC),VAFER	SAV250 YEONHO 5P 2.5MM STRAIGHT SN	YEON HO	CON4
8	6630JB8004L	CONNECTOR (CIRC),VAFER	SAV250 YEONHO 12P 2.5MM STRAIGHT SN	YEON HO	CON5
9	6630JB8004G	CONNECTOR (CIRC),VAFER	SAV250 YEONHO 8P 2.5MM STRAIGHT SN	YEON HO	CON6
10	0IZZJB2044N	IC,DRAWING	TMP87C846N 42P SDIP BK MASK BRAVO-PJT BEST	TOSHIBA	IC1(=0IZZJB2044P)
11	0ISC6350A0A	IC,POWER MANAGEMENT	STR-G6351 5PIN BK SMPS 2,4PIN FORM	SANKEN	IC2
12	0IPMPE001A	IC,POWER MANAGEMENT	PS2561L1-1-V NEC 4P,DIP BK = TLP721F	NEC	IC3
13	0IKE431000A	IC,KEC	KIA431 3 PIN TP - -	KEC	IC4
14	0IKE780500V	IC,LINEAR	KIA7805PI - - - -	KEC	IC5
15	0IKE6500308	IC,KEC	KID65003AP 16P SDIP BK DRIVE IC	KEC	IC6
16	0IKE704200A	IC,KEC	KIA7042P KEC 3P BK RESET	KEC	IC7
17	0ITD777400A	IC,DRAWING	TA7774AP 16,SDIP BK DRIVE,IC STEPPING MOTOR	TOSHIBA	IC8
18					
19	692000000 1A	RELAY	ALE15B12 MATSUSHITA 250VAC 16A 12VDC 1A NO VENTING	NAIS	RY1
20	692OJB2003A	RELAY	G5N-1A OMRON 250VAC 15A 12VDC 1A JAPAN	OMRON	RY4,RY5
21	692OJB2003D	RELAY	G5NB-1A-E OMRON 250VAC 5A 12VDC 1A NO VENTING	OMRON	RY2
22	692OJB2009B	RELAY	G5SB-14 OMRON 250VAC 5A 12VDC 1C NO VENTING	OMRON	RY3
23					
24	6212JB8001B	RESONATOR,CERAMIC	CSTS0400MG03 MURATA 4MHZ , TP -	MURATA	OSC1
25	6102JB8001B	VARISTOR	UNR14D621 1L JIN DC/VDE BK 620V	IL JIN	VA1
26	6102V5V007A	VARISTOR	UNR14D330K IL JIN DC/CSA/VDE BK	IL JIN	VA1
27	0DB360000AA	DIODE,RECTIFIERS	D3SBA60 BK SHINDENGEN - 600V 4A 80A - 10UA	SHINDENGEN	BD1
28	0DD400409AC	DIODE,RECTIFIERS	RECTIN4004 TP	DELTA	D7
29	0DR107009AA	DIODE,RECTIFIERS	FR107 TP RECTRON DO41 1000V 1A 30A 500NSEC 5A	DELTA	D1,D2,D5,D6
30	0DRSA00070A	DIODE,RECTIFIERS	RL2 SANKEN BK NON 400V 2A 40A 50NSEC 10UA	SANKEN	D3,D4
31	0CE105BK638	CAPACITOR,FIXED ELECTROLYTIC	1UF KME,RG,YX 50V 0.2 FM5 TP 5	SAM WHA	CE10
32	0CE106EK638	CAPACITOR,FIXED ELECTROLYTIC	10UF KMG 50V 20% FM5 TP 5	SAM WHA	CE6~CE9
33	0CE227BF638	CAPACITOR,FIXED ELECTROLYTIC	220UF KME TYPE 16V 20% FM5 TP 5	SAM WHA	CE5
34	0CE227BH638	CAPACITOR,FIXED ELECTROLYTIC	220UF KME,RG 25V 20% FM5 TP 5	SAM WHA	CE11
35					
36	0CE476BK638	CAPACITOR,FIXED ELECTROLYTIC	47UF KME TYPE 50V 20% FM5 TP 5	SAM WHA	CE2
37	0CE476ZV6E0	CAPACITOR,FIXED ELECTROLYTIC	47UF HE 450V 20% BULK SNAP IN	SAM WHA	CE1
38	0CE687YH6E0	CAPACITOR,FIXED ELECTROLYTIC	680UF RX 25V 20% BULK SNAP IN	SAM WHA	CE3
39	0CE687YJ618	CAPACITOR,FIXED ELECTROLYTIC	680UF RX 35V 20% TP 5 FL	SAM WHA	CE4
40	0CK102DK96A	CAPACITOR,FIXED CERAMIC(HIGH DIELECTRIC)	1NF 2012 50V 80%,-20% R/TP X7R	MURATA	CC17
41	0CK1040K949	CAPACITOR,FIXED CERAMIC(High dielectric)	0.1UF D 50V 80%,-20% F(Y5V) TA52	SAM WHA	CC3~CC7,CC10
42					
43	0CK22102510	CAPACITOR,FIXED CERAMIC(High dielectric)	220P 2KV K B S	SAM WHA	CC2
44	0CK2230K949	CAPACITOR,FIXED CERAMIC(High dielectric)	22NF 50V Z F TA52	SAM WHA	CC8,CC9,CC11~15,CC18
45	0CK223DK96A	CAPACITOR,FIXED CERAMIC(HIGH DIELECTRIC)	22NF 2012 50V 80%,-20% R/TP X7R	MURATA	CC16
46	0CK4710K519	CAPACITOR,FIXED CERAMIC(High dielectric)	470PF 50V K B TA52	SAM WHA	CC1
47	0CQ1031N509	CAPACITOR,FIXED FILM	0.01UF D 100V 10% PE TP5	SAM WHA	CM4
48	0CQ4732Y430	CAPACITOR,FIXED FILM	47000PF S 630V 5% M/PE NI R	SAM WHA	CM3
49	0CQ4741B670	CAPACITOR,FIXED FILM	0.47UF D 275V 20% M/PP NI R	SAM WHA	CM1,CM2
50	0LR1001M4F0	INDUCTOR,RADIAL LEAD	10000H 20% R 6X12.5 BULK	TNC	L3
51	0RN1001G609	RESISTOR,FIXED CARBON FILM	1K OHM 1/4 W 5% TA52	SMART	R19
52	0RN1002G609	RESISTOR,FIXED CARBON FILM	10K OHM 1/4 W 5% TA52	SMART	R15,R30,R35,RCR1
53	0RN2001G609	RESISTOR,FIXED CARBON FILM	2K OHM 1/4 W 5% TA52	SMART	R17,R20,R21,R27,R36,R39
54	0RN3901G609	RESISTOR,FIXED CARBON FILM	3.9K OHM 1/4 W 5% TA52	SMART	R34
55	0RN4701G609	RESISTOR,FIXED CARBON FILM	4.7K OHM 1/4 W 5% TA52	SMART	R4,R16,R18,R33
56	0RN5603H609	RESISTOR,FIXED CARBON FILM	560K OHM 1/2 W 5% TA52	SMART	R2
57					
58	0RH1001L622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1/8 W 5% 2012 R/TP	ROHM	R8
59	0RH1002L622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1/8 W 5% 2012 R/TP	ROHM	R28,R29
60	0RH1004L622	RESISTOR,METAL GLAZED(CHIP)	1MOHM 1/8 W 5% 2012 R/TP	ROHM	RI3
61	0RH1801L622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1/8 W 5% 2012 5.00% D	ROHM	R7
62	0RH2001L622	RESISTOR,METAL GLAZED(CHIP)	2K OHM 1/8 W 5% 2012 R/TP	ROHM	R22~R26,R38
63					
64	0RH3300L622	RESISTOR,METAL GLAZED(CHIP)	330 OHM 1/8 W 5% 2012 R/TP	ROHM	R31
65	0RH4701L622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1/8 W 5% 2012 R/TP	ROHM	R14
66	0RJ332E672	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1/8 W 5% 2012 R/TP	ROHM	R5
67	0RJ152IH672	RESISTOR,METAL GLAZED(CHIP)	1.5K OHM 1/2 W 5% 2012 R/TP	ROHM	R32
68					
69	0RJ2401E472	RESISTOR,METAL GLAZED(CHIP)	2.4K OHM 1/8 W 1% 2012 R/TP	ROHM	RL2
70	0RJ680DE672	RESISTOR,METAL GLAZED(CHIP)	680 OHM 1/8 W 5% 2012 R/TP	ROHM	R6
71	0RJ9101E472	RESISTOR,METAL GLAZED(CHIP)	9.1K OHM 1/8 W 1% 2012 R/TP	ROHM	RL1
72	0RN1002G409	RESISTOR,FIXED METAL FILM	10K OHM 1/4 W 1.00% TA52	SMART	RT1
73	0RN622G409	RESISTOR,FIXED METAL FILM	16.2K OHM 1/4 W 1.00% TA52	SMART	RF1
74	0RN2612G409	RESISTOR,FIXED METAL FILM	26.1K OHM 1/4 W 1.00% TA52	SMART	RR1,RD1
75	0RS0101J609	RESISTOR,FIXED METAL OXIDE FILM	1 OHM 1 W 5.00% TA52	SMART	ROCP
76	0RS0470J609	RESISTOR,FIXED METAL OXIDE FILM	0.47 OHM 1 W 5% TA52	SMART	ROCP
77	0RS1503J609	RESISTOR,FIXED METAL OXIDE FILM	150K OHM 1 W 5.00% TA52	SMART	R1
78	0RS56BK641	RESISTOR,FIXED METAL OXIDE FILM	56K OHM 2 W 5.00% F20	SMART	R3
79	0RS8202J609	RESISTOR,FIXED METAL OXIDE FILM	82K OHM 1 W 5.00% TA52	SMART	R1
80	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	KEC	Q3
81	0TRKE00008A	TRANSISTOR,BIPOLARS	KEC KTB1151 BK TO126 60V 5A	KEC	Q2
82	0TRKE80016A	TRANSISTOR,BIPOLARS	KEC KRC106S R/TP SOT23 50V 100MA	KEC	Q1
83	6200JB8004A	FILTER(CIRC),EMC	CV940058 TNC - -	TNC	L1
84	6200JB8007X	FILTER(CIRC),EMC	UU11-05320 TNC BK 0.5A 320MH	TNC	L2
85	6210JB8001A	FILTER(CIRC),EMC	RFS3510A0 SAMWHA TP52 BEAD FILTER	SAM WHA	FB1
86	6600RRT001Z	SWITCH,TACT	JTP1280A6 JEIL 12VDC 50MA -	JEIL	SW1
87	0DZNR00029A	DIODE,ZENERS	1N5232B MOTOROLA TP DO34 0.5W 5.6V 81MA PF	DEL TA	ZD1
88	6854B50001A	JUMP WIRE	0.6MM 52MM TP TAPING SN	DAE A LEAD	J01~J07,J09~J11(10MM) J08(8MM) J12,J13(12.5MM)
89	0FZJB3001A	FUSE,DRAWING	2A 250V - SLOW-BLOW LITTELFUSE,TRIAD	SAM JU KYU YUK	FUSE1
90	ISF0302418	SCREW TAP TITE(S),BINDING HEAD	+ D3.0 L8.0 MSWR3/FZY	HAENG SUNG	
91					
92	4920JB3007A	HEAT SINK	23.3*17*25 DRIVE IC STR R-S64,65,73 2PIN 1-SCREW 3MM -	(IC2)	(IC2)
93	49111004	SOLDER,SOLDERING	NA HEESUNG METAL BAR SN 63% NA	-	-
94	5933310S	FLUX	JS-71 KOKI SANKI KOREA(KSK) SG0.808 +/-0.003	-	-
95	9VVF0120000	SOLDER(ROSIN WIRE) RS0	D1.20	-	-

8-5-3 PWB Assembly, Display, And Parts List



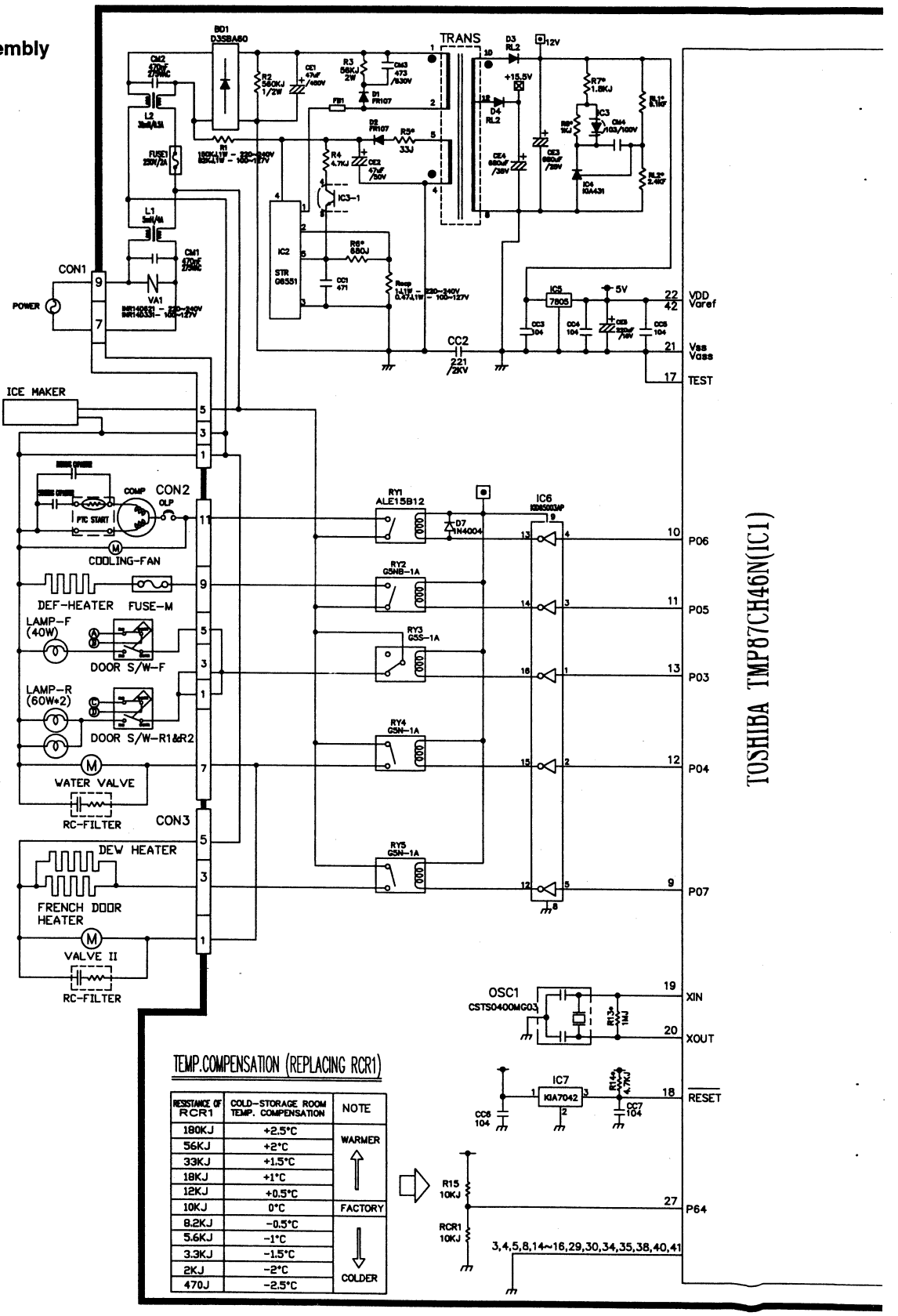
No	P/NO	DESCRIPTION	SPEC	MAKER	REMARK
1	-	PWB(PCB)	BRAVO-PJT BEST MODULE DISPLAY PCB	DAE DUCK	STH
2	-	-	-	-	-
3	-	REFLECTOR	BRAVO-PJT BEST PC-ABS	YANG WOO	-
4	-	-	-	-	-
5	4140JB1031A	NAME PLATE,P(H)	BRAVO-PJT BEST	YANG WOO	-
6	-	-	-	-	-
7	-	-	-	-	-
8	-	-	-	-	-
9	-	-	-	-	-
10	-	-	-	-	-
11	6630JB8005C	CONNECTOR (CIRC),WAFER	SMAV250-04	YEON HO	CON101
12	-	-	-	-	-
13	0IZZJB2041S	IC,DRAWING	TMP87CH47U 44P,QFP44-P-1010 TRAY BRAVO-PJT BEST	TOSHIBA	IC101(S=T)
14	-	-	-	-	-
15	-	-	-	-	-
16	-	-	-	-	-
17	-	-	-	-	-
18	-	-	-	-	-
19	-	-	-	-	-
20	0ISTLM1001A	IC,STANDARD LOGIC	M54563FP MITSUBISHI 20 R/TP CONVERT	MITSUBISHI	IC105
21	0IKE650030C	IC,KEC	KID65003AF 16SOP BK 7CH DRIVER	KEC	IC106,107
22	-	-	-	-	-
23	0ISTLKE002A	IC,STANDARD LOGIC	KIA78L05F KEC SOT-89 TP REGULATOR	KEC	IC102
24	0ISTLKE003A	IC,STANDARD LOGIC	KIA7042AF KEC SOT-89 TP RESET IC	KEC	IC103
25	0IRH934600D	IC,ROHM	BR93LC46RF-W 8PIN SOP BK EEPROM -	ROHM	IC104
26	0ISTLKE004A	IC,STANDARD LOGIC	KRA106S KEC SOT-23 TP TRANSISTOR	KEC	Q104
27	0ISTLKE005A	IC,STANDARD LOGIC	KRC106S KEC SOT-23 TP TRANSISTOR	KEC	Q101-103
28	-	-	-	-	-
29	-	-	-	-	-
30	6212BB3245A	RESONATOR,CERAMIC	CSTCR4M00G53-R0 MURATA 4.0MHZ +/- 0.5% T/R SMD	MURATA	OSC101
31	-	-	-	-	-
32	-	-	-	-	-
33	0CE107VF6DC	CAPACITOR,FIXED ELECTR	100UF MV 16V 20% R/TP(SMD) SMD	SAMHWA	CE101,102
34	0CE476VH6DC	CAPACITOR,FIXED ELECTR	47UF MV 25V 20% R/TP(SMD) SMD	SAMHWA	CE103
35	-	-	-	-	-
36	-	-	-	-	-
37	0CK104DK94A	CAPACITOR,FIXED CERAMI	100NF 2012 50V 80%,-20% R/TP F(Y5V)	MURATA	CC101-108
38	0CK102DK96A	CAPACITOR,FIXED CERAMI	1NF 2012 50V 80%,-20% R/TP X7R	MURATA	CC109
39	0RH1000L622	RESISTOR,METAL GLAZED(C	100 OHM 1 / 8 W 2012 5.00% D	ROHM	R123
40	0RD2200E672	RESISTOR,METAL GLAZED(C	220 OHM 1/8 W 5% 2012 R/TP	ROHM	R106
41	0RD1001E672	RESISTOR,METAL GLAZED(C	1K OHM 1/8 W 5% 2012 R/TP	ROHM	R102,107
42	0RD2001E672	RESISTOR,METAL GLAZED(C	2K OHM 1/8 W 5% 2012 R/TP	ROHM	R101,122
43	0RD4701E672	RESISTOR,METAL GLAZED(C	4.7K OHM 1/8 W 5% 2012 R/TP	ROHM	R103,104,108~110,125
44	0RD1004E672	RESISTOR,METAL GLAZED(C	1M OHM 1/8 W 5% 2012 R/TP	ROHM	R105
45	-	-	-	-	-
46	-	-	-	-	-
47	0RJ2700H680	RESISTOR,METAL GLAZED(C	270 OHM 1 / 2 W 5025 5.00% D	ROHM	R120
48	0RJ3300H680	RESISTOR,METAL GLAZED(C	330 OHM 1 / 2 W 5025 5.00% D	ROHM	R111-119
49	-	-	-	-	-
50	0RJ0000E672	RESISTOR,METAL GLAZED(C	0 OHM 1/8 W 5% 2012 R/TP	ROHM	JP1
51	0RJ0000E672	RESISTOR,METAL GLAZED(C	0 OHM 1/8 W 5% 2012 R/TP	ROHM	JP2
52	0RJ0000E672	RESISTOR,METAL GLAZED(C	0 OHM 1/8 W 5% 2012 R/TP	ROHM	JP3
53	0DZRM00188A	DIODE,ZENERS	RLZ ROHM R/TP LLDS(LL-34) 500MW 5.6V 20MA PF	ROHM	ZD101
54	0DRRM00028A	DIODE,RECTIFIERS	RLR4004 ROHM R/TP SOT23 400V 1A 20A SEC 10MA	ROHM	D131-106
55	0DSRM00068A	DIODE,SWITCHING	RLS4148 ROHM R/TP LLDS(LL-34) 75V 450MA 2000MA	ROHM	D107-111
56	-	-	-	-	-
57	0DLLE0098AA	LED	LEDTECH HT-S91UYG R/TP GREEN/YELLOW 40MCD	LEDTECH	L158-173(RT)
58	0DLLE0098AA	LED	LEDTECH HT-S91UYG R/TP GREEN/YELLOW 40MCD	LEDTECH	L101-104,118-131,134-147,150-153
59	0DLLE0098AA	LED	LEDTECH HT-S91UYG R/TP GREEN/YELLOW 40MCD	LEDTECH	L117,132,133,148,149,174-177
60	-	-	-	-	-
61	-	-	-	-	-
62	-	-	-	-	-
63	-	-	-	-	-
64	6908JB8003A	BUZZER,PIEZO CERAMIC	BM-20B BUJEON PIEZO 4KHZ 85DB	BUJEON	BUZZER
65	6600RRT005A	SWITCH,TACT	KPS-1105AM KYUNG INKHK) 12VDC 50MA SMD	KYUNG IN	SW101-105
66	-	-	-	-	-
67	49111001	SOLDER,SOLDERING	SOLDER(ROSIN WIRE)RSD	HUISUNG	-
68	49111004	SOLDER,SOLDERING	H63A	HUISUNG	-
69	59333105	FLUX	SG)0.825-0.830 KOREA F.H-206	KOKI	-
70	-	-	-	-	-
71	-	-	-	-	-
72	-	-	-	-	-

8-5-4 Circuit Diagram of Display



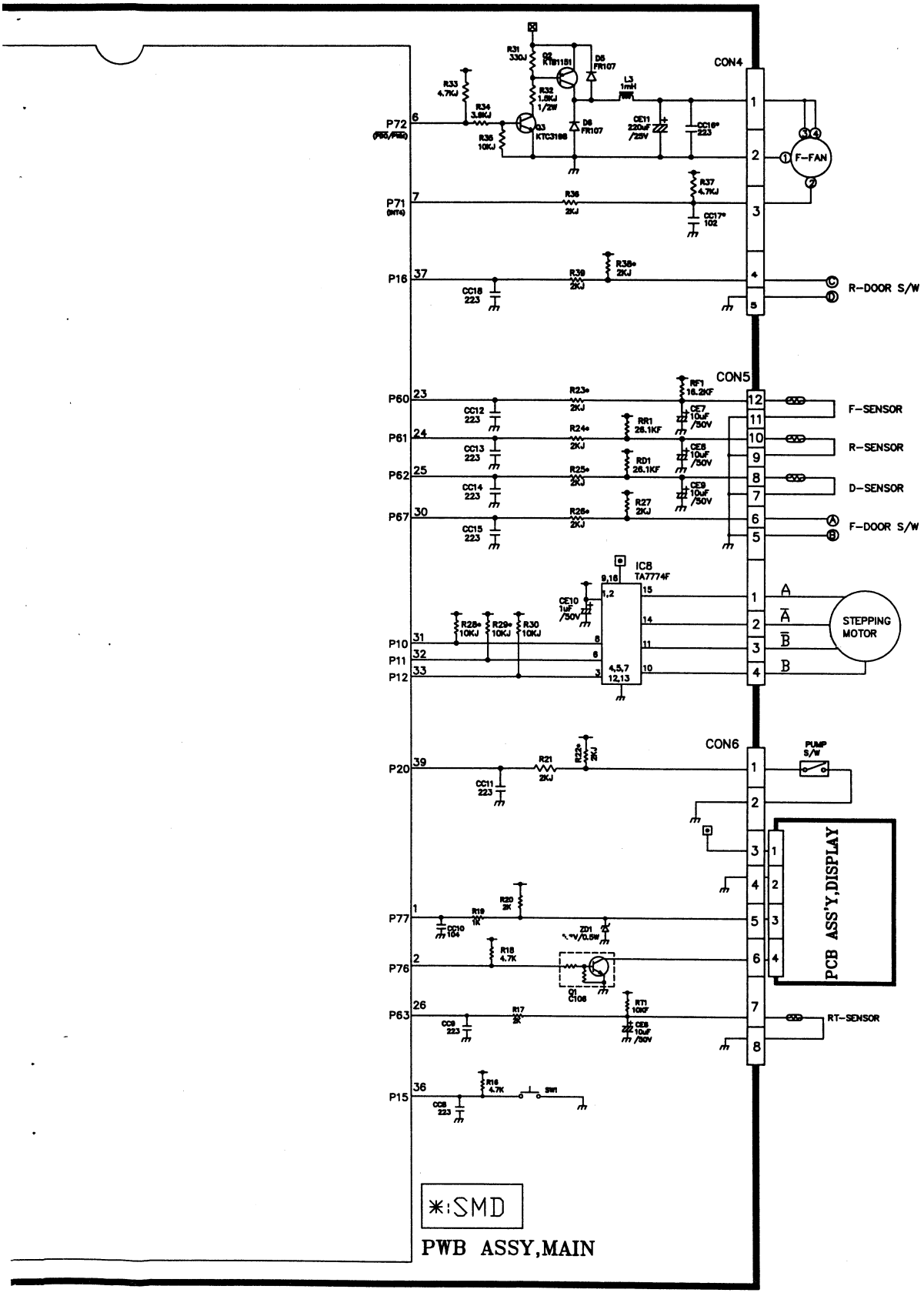
8-6 PWB DIAGRAM

8-6-1 PWB Main Assembly



TEMP.COMPENSATION (REPLACING RCR1)

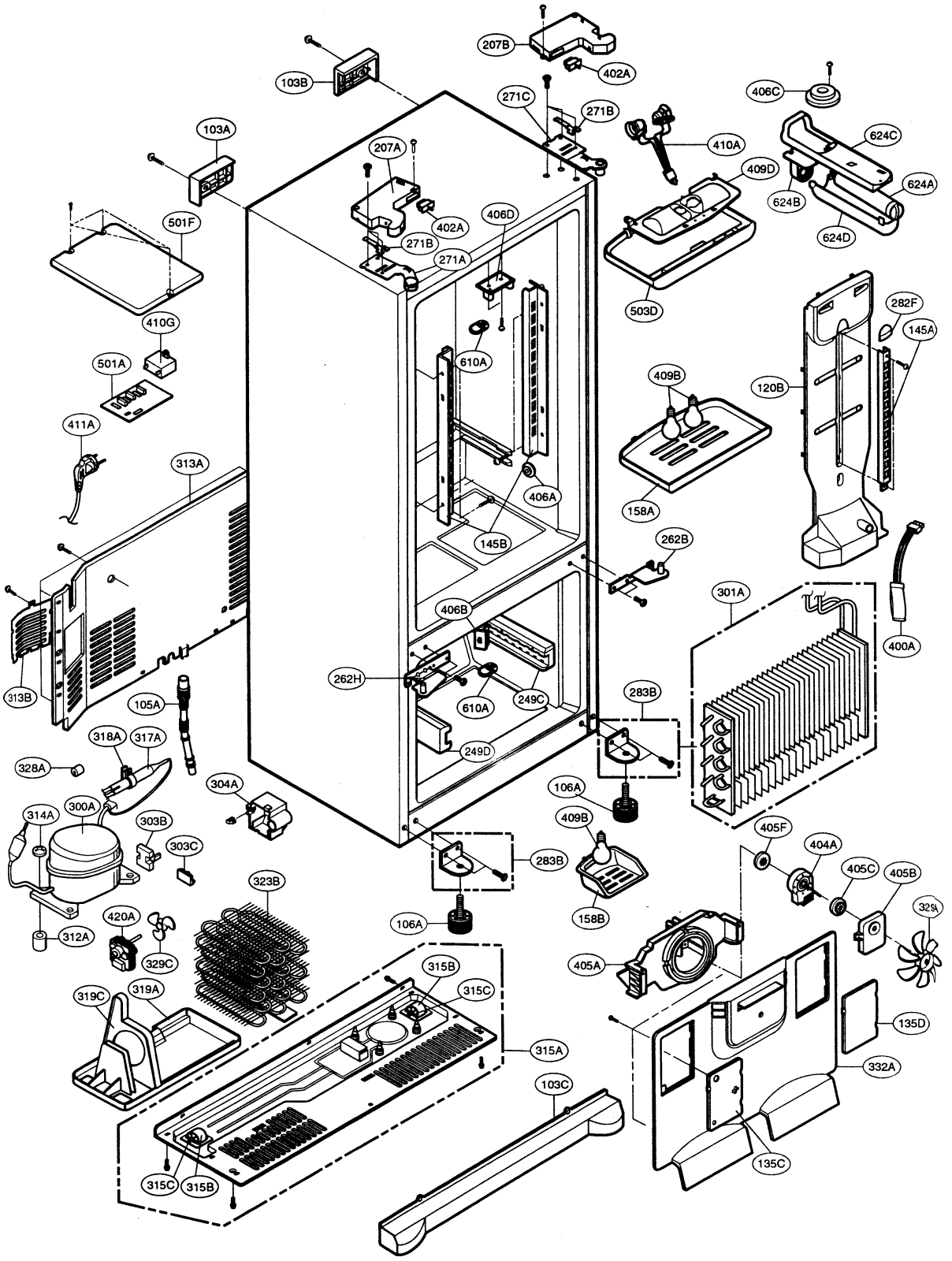
RESISTANCE OF RCR1	COLD-STORAGE ROOM TEMP. COMPENSATION	NOTE
180KJ	+2.5°C	WARMER
56KJ	+2°C	
33KJ	+1.5°C	
18KJ	+1°C	
12KJ	+0.5°C	
10KJ	0°C	FACTORY
8.2KJ	-0.5°C	COLDER
5.6KJ	-1°C	
3.3KJ	-1.5°C	
2KJ	-2°C	
470J	-2.5°C	


CON4
CON5
CON6
F-FAN
R-DOOR S/W
F-SENSOR
R-SENSOR
D-SENSOR
F-DOOR S/W
STEPPING MOTOR
PUMP S/W
RT-SENSOR
PCB ASS'Y,DISPLAY
IC8 TA7774F
P72
P71
P16
P60
P61
P62
P67
P10
P11
P12
P20
P77
P76
P63
P15
*:SMD
PWB ASSY,MAIN

9. EXPLODED VIEW & REPLACEMENT PARTS LIST

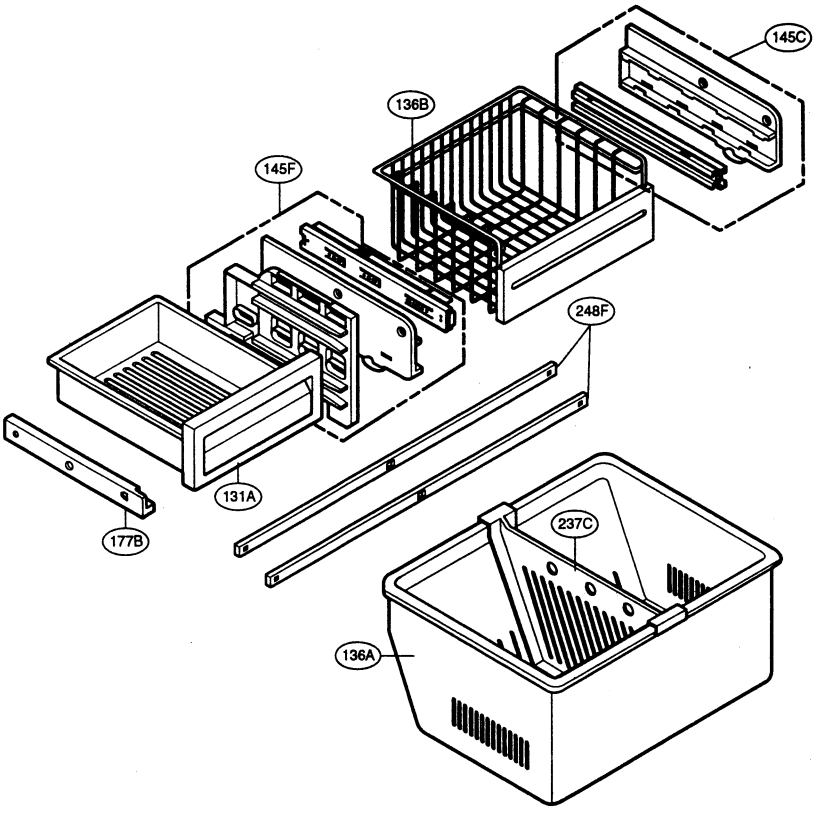
CASE PARTS

CAUTION: Use the part number to order part, not the position number.



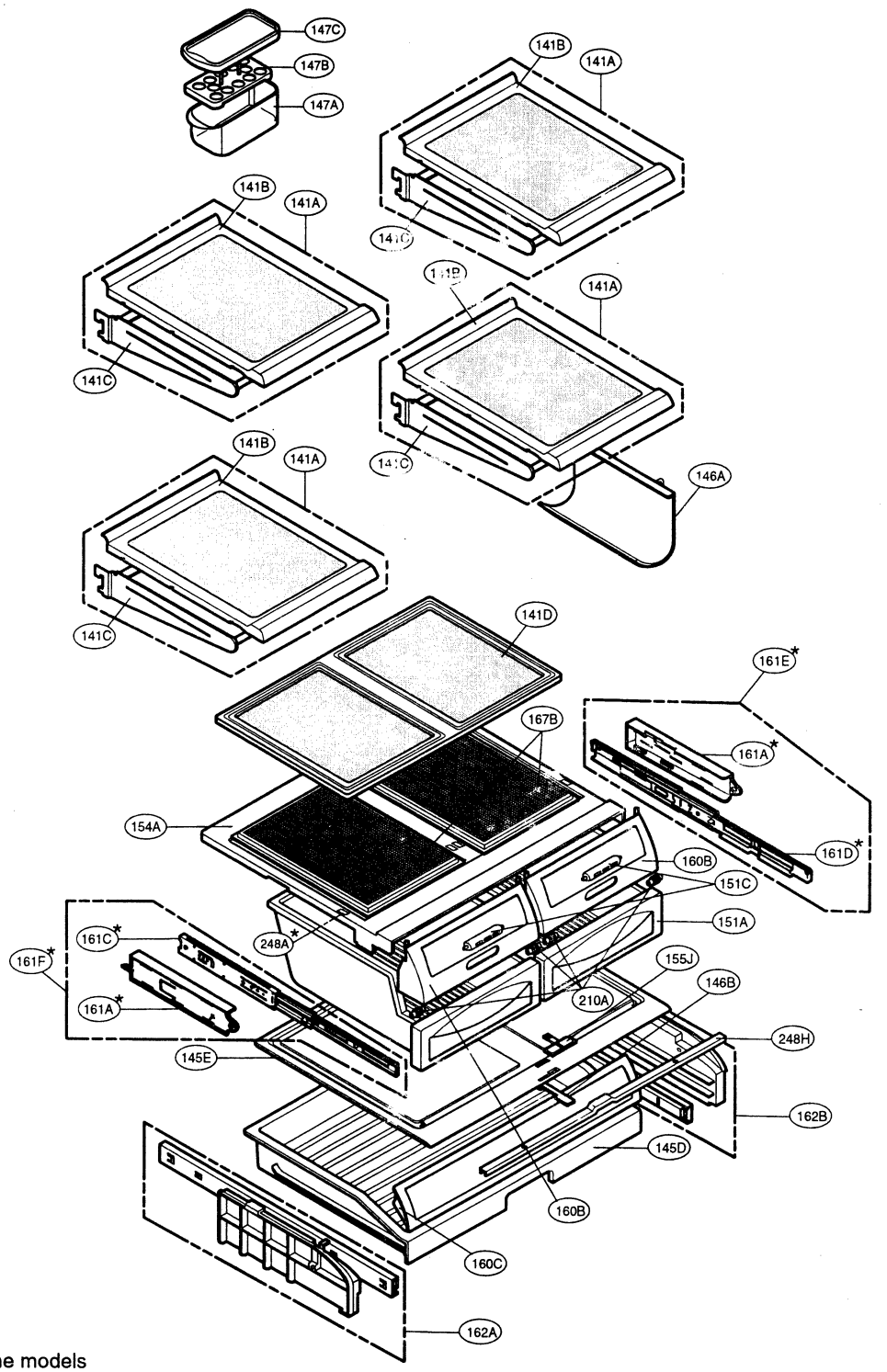
FREEZER PARTS

CAUTION: Use the part number to order part, not the position number.



REFRIGERATOR PARTS

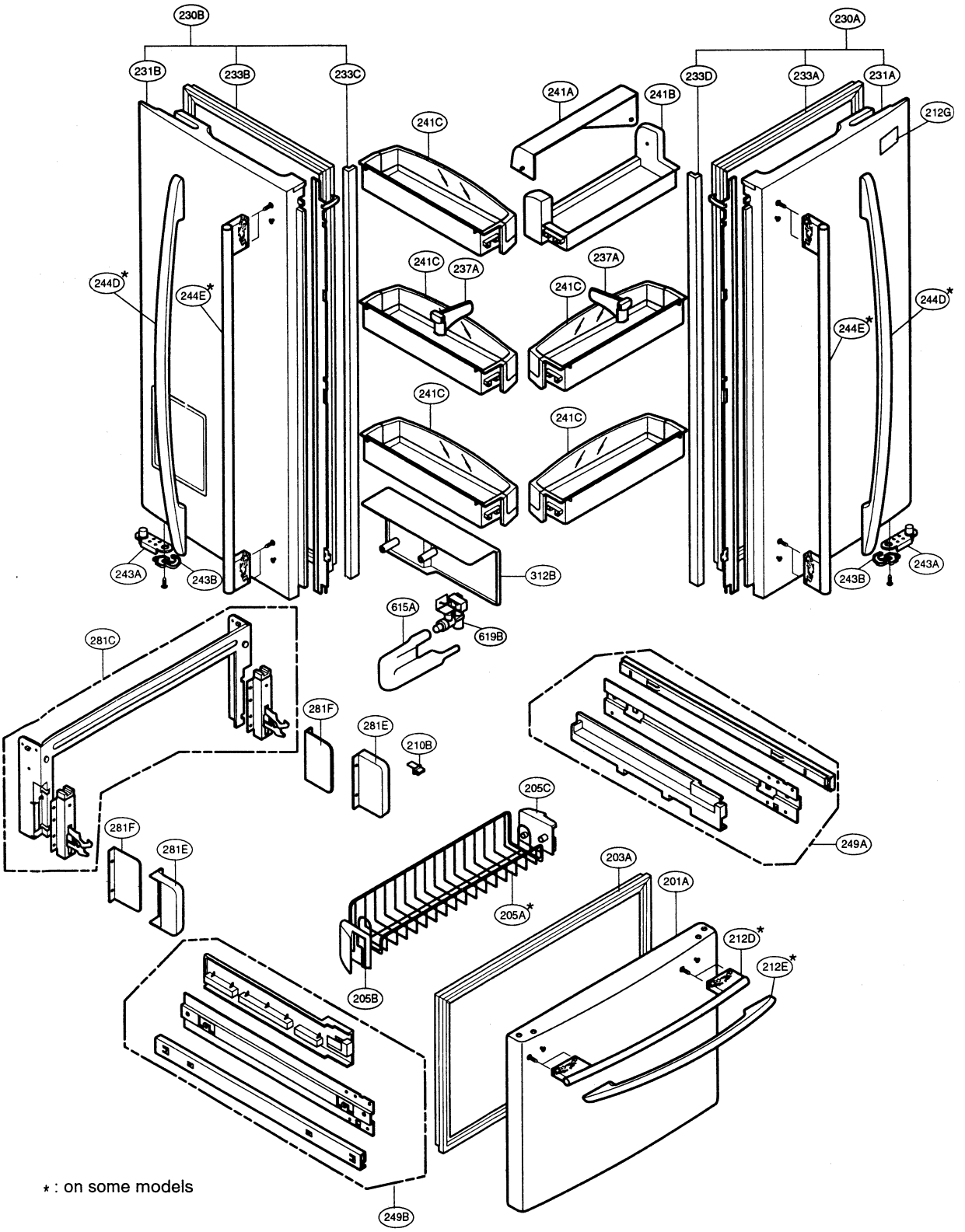
CAUTION: Use the part number to order part, not the position number.



* : on some models

DOOR PARTS

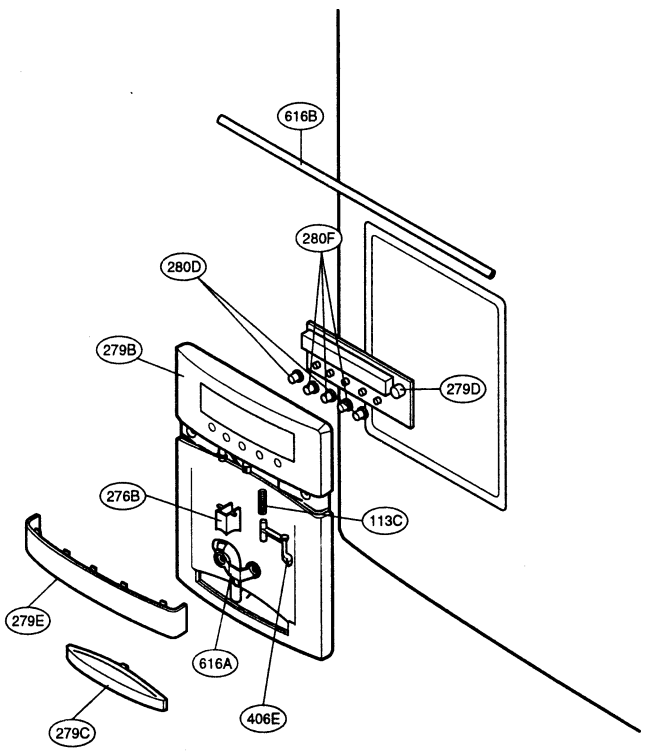
CAUTION: Use the part number to order part, not the position number.



* : on some models

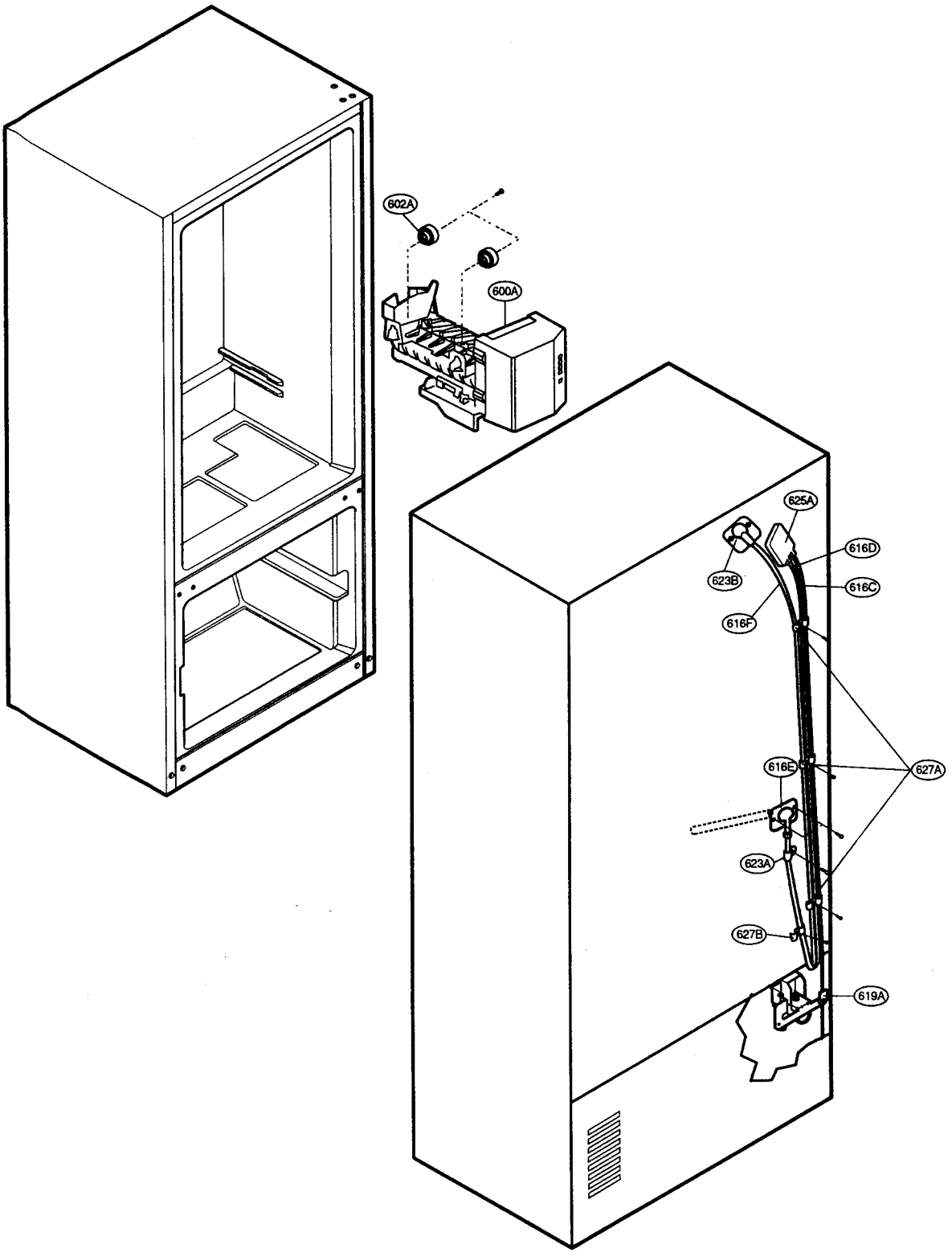
DISPENSER PARTS

CAUTION: Use the part number to order part, not the position number.



ICE & MAKER PARTS

CAUTION: Use the part number to order part, not the position number.



REPLACEMENT PARTS LIST

BUYER NAME:LGEDG MODEL NAME:GR-B218W LG REFERENCE NO:GR-F218JUTA.ALSQLGD
COLOR:Luxury Silver

S	AL	LOCA.NO	PART NO(LG)	DESCRIPTION	SPECIFICATION	REMARK
		103A	3650JA2061X	HANDLE,BACK		
		103B	3650JA2061W	HANDLE,BACK		
		103C	3550JJ0008G	COVER,LOWER		
		105A	5251JJ2003A	DRAIN ASSEMBLY,PIPE-Z		
		106A	4779JJ2001A	LEG ASSEMBLY,ADJUST		
		120B	5208JJ1055A	DUCT,MULTI		
		120H	3550JA3118A	COVER,LED		
		125D	4930JA2046A	HOLDER,SHUT OFF		
		131A	5075JJ2002A	BANK ASSEMBLY,ICE		
		135C	3550JJ2030A	COVER,GRILLE FAN		
		135D	3551JJ2028A	COVER ASSEMBLY,GRILL FAN		
		136A	3390JJ1073A	TRAY,DRAWER		
		136B	3391JJ2010A	TRAY ASSEMBLY,DRAWER		
		141A	5027JJ2014A	SHELF ASSEMBLY,R		
		141B	5026JJ1051A	SHELF,R		
		141C	5027JJ2012A	SHELF ASSEMBLY,NET		
		141D	4890JD1072B	GLASS,COVER-T/V		
		145A	4930JA2080C	HOLDER,SHELF		
		145B	4930JA2081C	HOLDER,SHELF		
		145C	4975JJ2007B	GUIDE ASSEMBLY,RAIL		
		145D	3391JJ1030B	TRAY ASSEMBLY,FRESH ROOM		
		145E	3550JL1011A	COVER,TRAY		
		145F	4975JJ2005C	GUIDE ASSEMBLY,RAIL		
		146A	J469-00030A	WINE RACK		
		146B	4520JJ1004A	LINK		
		147A	5074JJ1016A	BANK,DAIRY		
		147B	3390JJ1082A	TRAY,EGG		
		147C	3550JJ1084A	COVER,BANK		
		151A	3391JJ2012C	TRAY ASSEMBLY,VEGETABLE		
		151C	4940JA2026B	KNOB,SHUTTER		
		154A	3550JJ1079A	COVER,T/V		
		155J	4940JJ2009A	KNOB,SHUTTER		
		158A	3550JJ1070A	COVER,LAMP		
	A	158B	3550JA1386A	COVER,LAMP		
		160B	3551JJ2019A	COVER ASSEMBLY,TRAY		
		160C	3551JJ2021A	COVER ASSEMBLY,TRAY		
		161A	4930JJ1018A	HOLDER,RAIL		
		161A	4930JJ1018A	HOLDER,RAIL		
		161C	5218JJ2008A	RAIL,SLIDE		
		161D	5218JJ2008C	RAIL,SLIDE		
		161E	4975JJ2019B	GUIDE ASSEMBLY,RAIL		
		161F	4975JJ2019A	GUIDE ASSEMBLY,RAIL		
		162A	4975JJ2016A	GUIDE ASSEMBLY,RAIL		
		162B	4975JJ2016B	GUIDE ASSEMBLY,RAIL		
		167B	3550JJ1073A	COVER,MAGIC ROOM		
		177B	4974JJ1012A	GUIDE,RAIL		
		200A	3581JJ8039D	DOOR ASSEMBLY,F		
		201A	5433JJ8007B	DOOR FOAM ASSEMBLY,F		
		203A	4987JA2008E	GASKET ASSEMBLY,DOOR		
		205B	5006JJ2013A	CAP,COVER		
		205C	5006JJ2013B	CAP,COVER		
		207A	3550JJ1097N	COVER,HINGE		
		207B	3550JJ1097P	COVER,HINGE		
		210A	4580JJ3005A	ROLLER		
		212D	3651JJ2010M	HANDLE ASSEMBLY,F		
		212G	3846JD1007C	MARK		
		230A	3581JJ8041L	DOOR ASSEMBLY,R/R		
		230B	3581JJ8042D	DOOR ASSEMBLY,R/L		

REPLACEMENT PARTS LIST

BUYER NAME:LGEDG MODEL NAME:GR-B218W LG REFERENCE NO:GR-F218JUTA.ALSQLGD
COLOR:Luxury Silver

S	AL	LOCA.NO	PART NO(LG)	DESCRIPTION	SPECIFICATION	REMARK
		231A	5433JJ0048W	DOOR FOAM ASSEMBLY,R		
		231B	5433JJ0053N	DOOR FOAM ASSEMBLY,R		
		233A	4987JJ2002A	GASKET ASSEMBLY,DOOR		
		233B	4987JJ2002B	GASKET ASSEMBLY,DOOR		
		233C	3551JJ2030B	COVER ASSEMBLY,FRONT		
		233D	3551JJ2030A	COVER ASSEMBLY,FRONT		
		237A	4974JA2055A	GUIDE,BOTTLE		
		237C	4974JJ1032A	GUIDE,DRAWER		
		241A	5004JL1006A	BASKET,WINDOW		
		241B	5004JJ1057A	BASKET,DOOR		
		241C	5005JJ2014A	BASKET ASSEMBLY,DOOR		
		243A	4974JA2054A	GUIDE,WATER		
		243A	4620JJ3006J	STOPPER,DOOR		
		243B	4620JJ2009A	STOPPER,DOOR		
		243B	4620JJ2009A	STOPPER,DOOR		
		244E	3651JJ2009H	HANDLE ASSEMBLY,R		
		248F	4980JJ2012A	SUPPORTER,HOLDER		
		248H	4980JJ2014A	SUPPORTER,HOLDER		
		249A	5098JJ2002K	CONNECTOR ASSEMBLY (MECH)		
		249B	5098JJ2002J	CONNECTOR ASSEMBLY (MECH)		
		249C	4930JJ1017B	HOLDER,RAIL		
		249D	4930JJ1017A	HOLDER,RAIL		
		262B	4775JJ2017T	HINGE ASSEMBLY,C		
		262C	4350JA3005A	RING		
		262H	4775JJ2017V	HINGE ASSEMBLY,C		
		271A	4775JJ2014B	HINGE ASSEMBLY,U		
		271B	4510JA3004A	LEVER,HINGE		
		271C	4775JJ2014A	HINGE ASSEMBLY,U		
		273A	4970JA3025A	SPRING,LEVER		
		275C	4510JA2014A	LEVER,ICE MAKER		
		275D	4510JA2013A	LEVER,ICE MAKER		
		276A	4970JA3026A	SPRING,TRAY ICE		
		279B	3550JL1009E	COVER,DISPENSER		
		279C	3806JJ2045D	DECO,DISPENSER		
		279D	6871JB1281B	PWB(PCB) ASSEMBLY,DISPLAY		
		279E	3806JJ2046D	DECO,DRAIN		
		280D	5020JJ3005A	BUTTON,DECO		
		280E	5020JA3019A	BUTTON,DECO		
		280F	5020JJ3004A	BUTTON,DECO		
		281C	4811JJ2015A	BRACKET ASSEMBLY,DOOR		
		281E	3550JJ2043A	COVER,HINGE		
		281F	3550JJ2044A	COVER,HINGE		
		282F	3806JL1037B	DECO,DUCT		
		283B	4774JJ3002A	HINGE,L		
		301A	5421JJ1003E	EVAPORATOR ASSEMBLY		
		307A	2521C-A8028	COMPRESSOR,SET ASSEMBLY	LC80LAEM AR1E0IL	
		308A	6748C-0004B	P.T.C ASSEMBLY	P470MD #250 MURATA	
	A	309A	6750C-0004G	O.L.P	4TM232NFBYY-520	
		310A	3550JA2042A	COVER,P.T.C		
		312A	5040JA3071A	RUBBER,SEAT		
		312B	3550JL1012A	COVER,FRONT		
		313A	3551JJ2018A	COVER ASSEMBLY,BACK-M/C		
		313B	3550JJ2067A	COVER,VALVE		
		314A	4620JA3015A	STOPPER,COMP		

REPLACEMENT PARTS LIST

BUYER NAME:LGEDG MODEL NAME:GR-B218W LG REFERENCE NO:GR-F218JUTA.ALSQLGD
COLOR:Luxury Silver

S	AL	LOCA.NO	PART NO(LG)	DESCRIPTION	SPECIFICATION	REMARK
		315A	3103JJ1001H	COMP BASE ASSEMBLY,STD		
		315B	4580JA3033A	ROLLER		
		315C	4J04238A	PIN,DRAWING		
		317A	5851JA2003B	DRIER		
		318A	4930JA3034A	HOLDER,DRIER		
		319A	3390JJ0007A	TRAY,DRIP		
		319C	4974JJ1036A	GUIDE,FAN		
		323B	5403JJ1004B	CONDENSER ASSEMBLY,WIRE		
		328A	4J03020A	RUBBER,DAMPING		
		329A	5901JA1021A	FAN ASSEMBLY		
		329C	5901JA1013A	FAN ASSEMBLY		
		332A	3530JJ0007A	GRILLE,FAN		
		400a	6615JB2005H	CONTROLLER ASSEMBLY		
		402A	6600JB3007C	SWITCH,[PUSH]		
		404A	4681JK1004A	MOTOR ASSEMBLY,REF FAN		
		404A	6877JB3043A	HARNESS,JOINT		
		404B	6877JB3044B	HARNESS,JOINT		
		404C	6877JB3045A	HARNESS,JOINT		
		405A	4810JJ0003A	BRACKET,MOTOR		
		405B	4810JJ2005A	BRACKET,MOTOR		
		405C	5040JA2009B	RUBBER,MOTOR-F		
		405D	6549JB2001D	MOTOR(CIRC),SYNCHRONOUS		
		405F	5040JA2004B	RUBBER,MOTOR-F		
		406A	4930JJ3020A	HOLDER,BRACKET		
		406B	6600JB3003A	SWITCH,[ROCKER]		
		406B	6600JB1004A	SWITCH,[PUSH]	250V	
		406C	4930JA3037A	HOLDER,BRACKET		
		406D	4930JJ2016A	HOLDER,DOOR		
		408A	5300JK1005B	HEATER,SHEATH	350W	
		409B	6912JB2004E	LAMP,[INCANDESCENT]	240V 40W	
		409D	3034JA1009A	REFLECTOR,LAMP		
		410A	6621JK2002D	SOCKET ASSEMBLY,LAMP	125V	
		410G	0CZZJB2014A	CAPACITOR,DRAWING	400V	
		411A	6411JB1013K	POWER CORD ASSEMBLY		
		420A	4681JK1001F	MOTOR ASSEMBLY,COOLING		
		501A	6871JB1149D	PWB(PCB) ASSEMBLY,MAIN		
		501F	3550JJ1078A	COVER,PWB		
		501G	3550JD1064A	COVER,PWB		
		501f	3550JJ1078A	COVER,PWB		
		503D	3110JJ1014A	CASE,LAMP		
		510A	6501JB3004A	SENSOR ASSEMBLY		
		600A	5989JA0002D	ICE MAKER ASSEMBLY,KIT		
		602A	4930JA3090A	HOLDER,BRACKET		
		610A	3550JD1107A	COVER,SENSOR		
		613A	4974JA1061A	GUIDE,ICE		
		615A	4839JJ2005B	TANK ASSEMBLY,WATER		
		615B	5221JB2005B	VALVE ASSEMBLY,WATER		
		616A	5210JJ3008B	TUBE,INJECT		
		616C	5210JA3004U	TUBE,PE		
		616D	5210JA3005Q	TUBE,PE		
		616E	5210JJ3002A	TUBE,INLET		
		616F	5210JA3004S	TUBE,PE		
		619A	5221JB1004D	VALVE ASSEMBLY,WATER		
		623A	4J02645G	TIE WRAP		

REPLACEMENT PARTS LIST

BUYER NAME:LGEDG MODEL NAME:GR-B218W LG REFERENCE NO:GR-F218JUTA.ALSQLGD
COLOR:Luxury Silver

S	AL	LOCA.NO	PART NO(LG)	DESCRIPTION	SPECIFICATION	REMARK
		623B	5006JJ2009A	CAP,COVER		
		623a	4770JA3001A	BAND (MECH)		
		624A	5231JA2006A	FILTER ASSEMBLY,WATER		
		624B	5230JA2003A	FILTER(MECH),HEAD		
	A	624B	5210JA3013B	TUBE,PE		
		624C	3550JJ1077A	COVER,FILTER		
		624D	3550JL1018A	COVER,FILTER		
		625A	3550JA2184A	COVER,TUBE		
		627A	4930JJ3018A	HOLDER,PIPE		
		627B	4930JA3054A	HOLDER,PIPE		
		628A	4470JA2001A	GEAR,ICE		
		628B	4430JA2009A	CAM,SHAFT		
		628C	4980JA0001A	SUPPORTER,ICE MAKER		
		628E	4810JA2078A	BRACKET,ICE MAKER		
		629A	5016JA3009A	MAGNET		
		629B	4930JA2047A	HOLDER,MAGNET		
		629C	3300JA1002A	PLATE,ICE MAKER		
		629D	3558JA2001A	EJECTOR,ICE		
		629E	3391JA2030B	TRAY ASSEMBLY,ICE		